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ABSTRACT

Objectives of the research reported here (phase one of a two-phase project) were (1) to assess the contemporary conditions of American correctional institutions in terms of capacity and adequacy; (2) to search for the causes of fluctuations in prison populations; and (3) to develop methods for projecting future prison populations, with particular reference to policy alternatives which might affect the level of imprisonment. Information is provided in seven chapters: (1) presentation of the scope and limitations of the report, and principal findings; (2) illustration of different responses by state governments to the prison crowding problem by examination of case studies in four states; (3) analysis of data from a national survey of state and federal corrections agencies and institutions with particular reference to the issues of capacity and adequacy; (4) presentation of projection techniques, and an overview of the projection problem; (5) presentation of the results from two trend analysis techniques used in making projections; (6) review of the scope and limitations of the Dynamic Modeling technique which attempts to account for the differential impact of specific policy alternatives; and (7) outline of a number of key policy issues arising from the study which confront federal and state governments. (A summary of the survey methodology and a presentation of the Markov modeling exercise to be applied on phase two are available as a separate technical appendix.) (BL)

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PRISON POPULATION
AND
POLICY CHOICES

Volume I:
Preliminary Report to Congress

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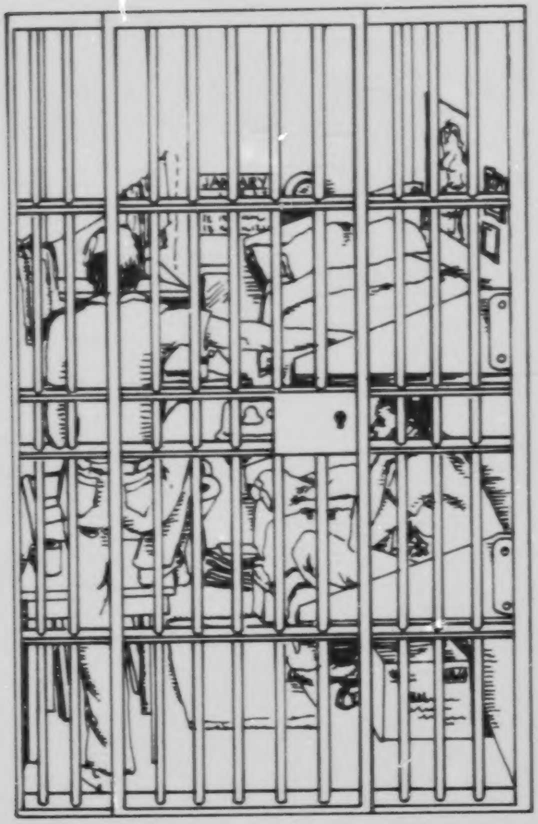
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I. INTRODUCTION AND PRINCIPAL FINDINGS

The Congressional Mandate

On October 15, 1976, the Crime Control Act of 1976 was enacted into law. It included a provision specifying the following mandate:

> The Institute shall, before September 30, 1977, survey existing and future needs in correctional facilities in the Nation and the adequacy of Federal, State, and local programs to meet such needs. Such survey shall specifically determine the effect of anticipated sentencing reforms such as mandatory minimum sentences on such needs. In carrying out the provisions of this section, the Director of the Institute shall make maximum use of statistical and other related information of the Department of Labor, Department of Health, Education and Welfare, the General Accounting Office, Federal, State, and local criminal justice agencies and other appropriate public and private agencies.[1]

The National Institute of Law Enforcement and Criminal Justice, within the Law Enforcement Assistance Administration, was assigned the responsibility for executing the study. The Institute, recognizing the formidable nature of the task, estimated that at least 22 months were necessary to address the mandate. In order to be responsive to both the statutory requirement for a report to Congress no later than September 30, 1977, and the complexity of long-range issues, a two-phased research project was developed. This preliminary report, which represents Phase I of the study, has been completed in four months. The preliminary nature of the report should be recognized so that the caveats stressed at various places in the text are fully appreciated.

The study addresses three sets of issues:

- Assessment of the contemporary condition of American correctional institutions in terms of capacity and adequacy. Problems encountered with both these measures during Phase I are discussed below.
- Search for the causes of fluctuations in prison populations.
- Development of methods for projecting future prison populations, with particular reference to policy alternatives which might affect the level of imprisonment. For the purposes of this study, the Congressional mandate to assess future needs was defined to cover 1977-82.

Scope and Limitations of This Report

Three activities have defined the scope of the Phase I effort. First, a national survey was conducted of all Federal and State correctional institutions. Second, an assessment was made of forecasting technology and preliminary application of four projection techniques. Finally, case studies were undertaken to illuminate the mechanisms determining prison population policy by State governments.

A Survey of Federal and State Correctional Agencies and Institutions

A major effort of Phase I has been to survey all State prison systems and the Federal Bureau of Prisons to determine both population fluctuations since 1970 and plans to either extend or reduce total capacity between 1977 and 1982. Furthermore, every State and Federal prison was asked to provide data on its capacity and present population. Responses were received from the Federal Bureau of Prisons and every State corrections system, in addition to all Federal and State correctional institutions.*

It should be noted that the Phase I survey excluded four significant aspects of the problem:

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* Excluding work release and some prerelease centers, from which there was also a high rate of return.

- No local facilities were surveyed.
- Projection statistics refer only to inmates with sentences greater than one year.
- Juvenile institutions are not considered.
- Institutional capacity was based only on data obtained in the study's survey, and not on any uniform standard.

Exclusion of local facilities: local facilities have been excluded from primary consideration at this stage in order to avoid duplicating surveys sponsored by the National Criminal Justice Information and Statistics Service and conducted by the U.S. Bureau of Census. During Phase II of this effort, the research team will collaborate closely with these efforts to collect data on local jails. As a result of this exclusion, the Phase I report may not provide a full picture of State population flows; interrelationships exist between State correctional facilities and those controlled by local government. Three points should be emphasized:

- Considerable variation exists among States in jurisdictional responsibility for prisoners. In five jurisdictions, for example, the State corrections agency is responsible for pretrial detention facilities.* There are many States where persons sentenced to one year or more need not fall under State jurisdiction, and others where the State assumes jurisdiction over those with shorter sentences. As discussed in Chapter II, recent jurisdictional changes in South Carolina, transferring misdemeanant prisoners serving 90 days or more to State custody, had a marked impact on the population reported by the State's Department of Corrections. In contrast, Pennsylvania prisoners sentenced up to 24 months can be held in local facilities.
- As a result of the overcrowding in many State prisons, persons under State custody are held in local jails awaiting prison space in which to serve their time. In Alabama, for example, as a result of the court's order in Pugh v. Locke[2], 2160 State prisoners were being held in county jails on December 31, 1976. At that time, 7738 State prisoners were backed up in local jails in 10 states.[3] (In seven of these

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* Alaska; Connecticut; Delaware; Rhode Island; Washington, D.C.

States, such prisoners are not considered to be in custody of the State correctional system, whereas in the remaining three they are.) This backing-up in local facilities in many cases has simply shifted part of the overcrowding problem from State to local facilities.[4] Since January 1, 1977, at least two additional States have begun similar practices.

- State prisoners are credited with time spent in pretrial detention. Court reform measures, such as speedy trial legislation, can result in shift of imprisonment time from jail to prison.

Exclusion of prisoners sentenced to a year or less: the jurisdictional variations described above complicate the problem of formulating a uniform definition of State inmate population. For this and other reasons, 17,500 (or six percent) prisoners in State and Federal prisons are not serving sentences of more than a year.[5] This group includes prisoners with sentences of a year or less, as well as unsentenced persons. The research undertaken for this report excluded this group in all projection calculations; thus the projections reported in Chapters V and VI are limited to prisoners with sentences of one year or more. In the analysis of prison capacity, however, the findings relate to all Federal and State inmates, regardless of sentencing or length of sentences.

Exclusion of juvenile institutions: the research is confined to adult correctional institutions and excludes from consideration public and private institutions for juvenile offenders.* Although this study is confined to adult institutions, there are persons younger than 18 years in such facilities.** On the other hand there are 1844 adults (persons 18 and over) held in California institutions controlled by the State Department of Youth Authority.[6]

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* It is estimated that there are 292 public juvenile institutions with a total population of 30,600. In addition, there are 21,000 delinquent juveniles in private institutions. (Children in Custody, Law Enforcement Assistance Administration, 1977.) It is interesting to note that juvenile institutional populations did not experience a similar upward trend in the early 1970s, and in fact appear to have continued to decline.

** The age of juvenile court jurisdiction varies from State to State; in 38 jurisdictions it is up to 18, in nine up to 17, and in five States up to 16. Furthermore, virtually all States include provision for the transfer of jurisdiction from juvenile to adult court in specified situations. There is also provision in many States for the transfer of inmates from juvenile to adult facilities on administrative grounds, usually associated with behavior problems.

Absence of standardized definitions for rated capacity and institutional adequacy: Phase I survey respondents used different ways of calculating the rated capacity of their institutions. The difficulties of using "rated capacity" as a measure of prison crowding are given considerable attention in this report. There is even less agreement among corrections authorities as to what constitute standards of adequacy. During Phase II, standards for both measures will be explored in detail in order to view all institutions against uniform definitions of capacity and adequacy.

Assessment of Forecasting Technology and Preliminary Application of Three Projection Techniques

It is important to stress that there is no technology that will provide precise predictions of prison populations. Even over the short run, the task is both complex and pioneering.

To the best of our knowledge, this study represents the first attempt to project the number of inmates of each State prison system. Many State Departments of corrections have routinely prepared their own annual projections, often with considerable sophistication. Two recent studies have provided projections of the total number of inmates in all State prison systems. In 1974 the Congressional Research Service[7] prepared a set of projections based on a presumed relationship between unemployment rates and prison intake. In that report, "the unemployment [was projected] to be 5.4% in fiscal year 1975, [and was] assumed to fall gradually to 4.0% and level off at that point.' This produced a projection in which the peak prison population occurred in 1980, when a total of 277,800 inmates were to be imprisoned in State and Federal institutions. This projected peak level was passed approximately two years after the release of the report. The actual counts on December 31, 1976, totalled 280,677.

In 1976 the National Planning Association[8] prepared a series of projected manpower needs for each component of the criminal justice system, using an econometric two-stage least squares model. The number of prison inmates appeared as an intermediate variable in the corrections sector of the model, and as a function of the number of arrests and levels of employment in the prosecution, defense, and corrections sectors of the model. Although the report was released in November 1976, the most recent prisoner statistics used were from 1974. The model projected a gradual increase in the prison population over a ten-year forecast period. Like the CRS projections, the NPA projected peak has already been exceeded. Viewing these studies with the advantage of hindsight has served to make us cautious in our approach to the projection problem. In particular, this report differs from any previous study in its emphasis on the relationship between criminal justice policy and the number of inmates imprisoned. In most State prisons, half the inmates are released within two to three years of their admission. Projecting the population levels of 1982 from data describing December 31, 1976 requires a leap of six years--enough time for two to three full prison generations to be admitted and released.* Projecting over a comparable number of generations in ordinary demography would carry us to the year 2040. The principal difference between our task and the demographer's is that the continuity of biological populations, and hence the certainty of their projections, is somewhat greater than in the prisons.

Futures research, despite its predictive limitations, can provide useful insights into the mechanisms that influence future events. An important mission of this study is to attempt to understand the implicit and explicit policies that may determine the size of the prison population. One of the techniques used in this study, Dynamic Modeling, a computer simulation technique, goes beyond projections that merely extrapolate from past trends; it represents a preliminary attempt to assess the impact of eight specific policy scenarios. It is emphasized in this report that this modeling exercise is best described as a means of attempting to understand the manner in which criminal justice processes interact; it is not, in a strict sense of the term, a prediction technique.

The projection work undertaken in Phase I has drawn largely on existing technology. Given the present state of the art, wide margins of error are inevitable. In Phase II these and other techniques will be further developed and refined.

Case Studies of the Determination of Prison Population Policy

The third activity undertaken during Phase I involved selected studies of the prison population situation during the summer months of 1977. Four States were visited by members of the research team to gain firsthand understanding of the problem, and to describe how these States approached the task of determining prison population policy. These site visits brought field researchers into direct contact with with key policymakers and well-informed observers of the criminal justice process; this sharpened the research team's understanding of the political context within which correctional policy is determined. Other data gained during the case study effort have aided the description of the varied conditions existing in prison facilities.

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* A prison generation is based on the average length of stay in prison which is currently between 2 and 2.5 years.

Before presenting a summary of the principal findings of Phase I, we turn to a brief discussion of the political context of the prison population problem.

Prison Population and Its Political Context

During the last 20 years, the number of persons imprisoned in the United States has twice shifted abruptly. After a period of gradual increase through the twentieth century, pausing only episodically, the total population in the nation's prisons at the end of 1962 was 219,030. Over the next six years, the population declined; and by the end of 1968 it descended to 187,614, a drop of 14.3 percent. In 1973 the trend reversed; during the next four years, most correctional facilities severely stretched their physical capacity and other resources to accommodate sharp increases in their population. By the end of 1976 the nation's prison population was 280,677, having increased by 86,962, or 44 percent since 1973[9] (see Figure 1.1).

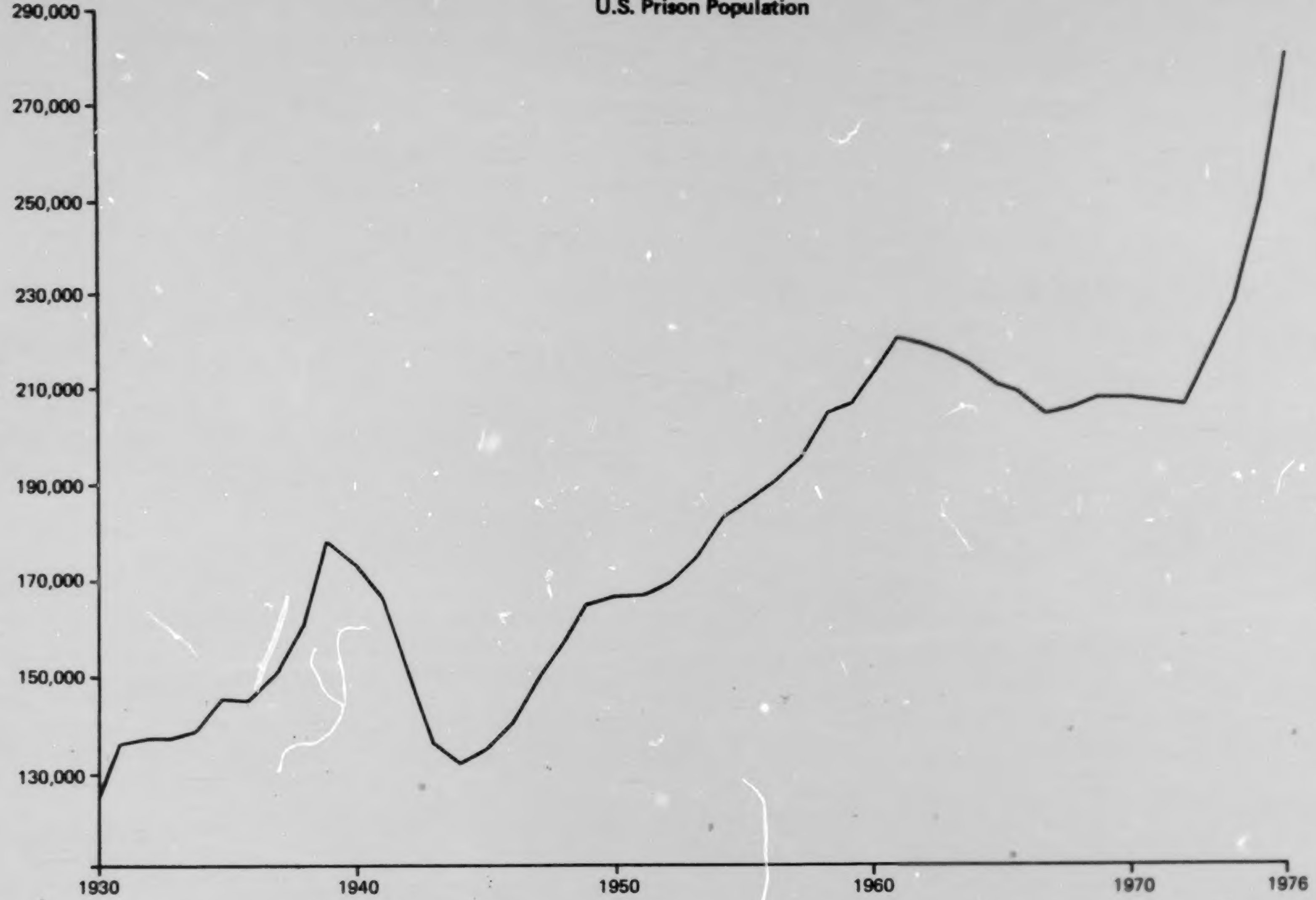
During this same period sharp changes have taken place in the way in which the purposes of corrections and imprisonment have been viewed. In 1967 the President's Crime Commission called for a "new corrections" which placed an emphasis on community-based alternatives to prison. The President's Commission urged that when imprisonment was required it occur in small facilities adjacent to urban areas, and be based upon a "collaborative regime" between staff and prisoners.[10]

The tragedy at Attica Prison, New York, in September 1971 prompted an inquiry by the U.S. House Select Committee on Crime which drew attention to the absence of programs with rehabilitative aims in most prisons. Two years later the National Advisory Commission on Criminal Justice Standards and Goals went beyond earlier policy positions, stating that prisons were massive failures. The National Advisory Commission believed that "the most hopeful move toward effective corrections is to continue and strengthen the trend away from confining people in institutions and toward supervising them in the community." It concluded that "some institutions will be necessary for the incarceration of adults who cannot be supervised in the community without endangering its safety, but that there are more than enough facilities at hand for this purpose."[11] Furthermore, the Commission recommended that States refrain from building more institutions during the next decade, except where total system planning showed an imperative need.[12]

During this same period, both liberal and conservative commentators on criminal justice and corrections problems revised their views on the value of rehabilitation. Conservatives tended to give new emphasis to utilitarian rationales for punishment, suggesting

Figure 1.1

U.S. Prison Population



the use of confinement as a means of incapacitating offenders and reducing their opportunities to commit further offenses.[13] Liberals, on the other hand, shifted much of their attention from prison reform efforts to the development of more just and equal sentencing arrangements.[14] The disenchantment with the rehabilitation ideal partially was a consequence of a series of reviews of the evaluation literature which seriously discredited the value of rehabilitation programs both inside and outside the prison.[15] From both perspectives a political concensus has emerged on the need for sentencing reform. The inequities of indeterminate sentencing systems which grant massive and often unstructured discretion to parole boards to set release dates have become a matter of considerable concern at the Federal level and in many State legislatures.[16]

The Recent Rise in Prison Populations

Ironically, publication of the National Advisory Commission's report in 1973, with its recommendation against further prison construction, coincided with the most recent upward fluctuation in prison populations. This increase led to severe overcrowding in some states, where there was little dispute that institutional capacity was unable to cope with the situation. In several jurisdictions overcrowding reached crisis proportions: two and sometimes more prisoners were assigned to cells designed for only one prisoner, an emergency measure used to make room for the rapidly increasing number of prisoners. In this situation, there were reports that the safety of both prisoners and staff, as well as the privacy of prisoners, were being severely compromised.[17]

The increasing problems resulting from prison population growth caused major policy dilemmas for Federal, State, and local governments. At present, large appropriations have been requested by the Federal Bureau of Prisons and many State departments of corrections, and several jurisdictions have already commenced building or renovation programs to meet additional capacity needs or to replace outmoded facilities.

There are, however, groups that oppose further prison construction. The National Council on Crime and Delinquency has issued policy statements calling for an end to prison construction.[18] A National Moratorium on Prison Construction has been formed to advance the argument against prison construction.[19] It is argued by some of those opposed to prison construction that additional prison capacity will generate an increased number of prisoners; and that as very few prisons have been closed in this century, those new facilities intended as replacements for older prisons often simply serve to supplement them.*

In recent years, courts, especially Federal, have played a larger role in setting institutional standards. The "hands-off" doctrine has eroded since the early 1960s and the courts have subsequently addressed a broad range of policy issues. More recently, litigants have made comprehensive attacks on entire State prison systems.** As a result, more than half the States are presently either under court order to reform their institutions, or are facing litigation.*** In several of these suits, the major complaint stems directly from overcrowding.[21] A landmark court decision pertaining to prison overcrowding was issued in the case of Pugh v. Locke, in which U.S. District Court Judge Frank M. Johnson laid down specific standards governing what the Alabama prison system must provide its inmates. At the time of Judge Johnson's original order in August 1975, there were 5100 prisoners. The court found that the prison environment "not only makes it impossible for inmates to rehabilitate themselves, but also makes dehabilitation inevitable"; and that idleness arising from overcrowding "destroys any job skills and work habits inmates have had, and contributes to their mental and physical degeneration."[22] In response to these findings, Judge Johnson issued an order that addressed 11 aspects of institutional management: overcrowding; segregation and isolation; classification; mental health care; protection from violence; living conditions; food service; correspondence and visitation; educational, vocational, and recreational opportunities; physical facilities; and staff. The court ordered a ban on the acceptance of more prisoners into the State system until the prison population was reduced to a rated capacity of 2600.

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* Among the few prisons closed this century are Alcatraz (by the Federal Bureau of Prisons in 1963); the Eastern State Penitentiary, Pennsylvania in 1969; and the State Corrections Facility in Vermont (in 1975). The Ohio State Penitentiary was due to be closed in 1973 and replaced by the Southern Ohio Correctional Facility at Lucasville. However, in late 1973, sections of the Penitentiary were reopened. (It housed 981 prisoners on June 30, 1977, according to this study's survey.)

** The first case of this kind was Holt v. Sarver, 309 F. Supp. 363 (E.D. Ark. 1970) aff'd 442 F 2d 304 (8th Circ. 1971), where the Court found the Arkansas prison system to be in violation of the Constitution.

*** As of July 1977, the following two categories of court activity in States existed:

a. States in which there were existing court decisions involving the entire State prison system or the major institutions in the State and which deal with overcrowding or the total condition of confinement (not including jails): Alabama, Arkansas, Delaware, District of Columbia, Florida, Louisiana, Minnesota, Mississippi, Nevada, New Hampshire, Ohio, Oklahoma, Wyoming, Puerto Rico, and the Virgin Islands.

b. States in which there was pending litigation dealing with overcrowding or the total condition of confinement--either entire systems or major institutions (not jails): Arizona, Colorado, Georgia, Illinois, Indiana, Maryland, Michigan, Missouri, New Jersey, Rhode Island, South Carolina, Tennessee, Texas, Utah.[20]

In Rhode Island, a Federal court judge recently found that the State's maximum-security facility, built a century ago to house 55 prisoners, had for the last five years held an average of 420 inmates; almost one-third were pretrial detainees. The court concluded that the prison presented an imminent public health, fire, and safety hazard and ordered it closed within one year.* Court intervention represents one of several approaches to developing and enforcing minimum standards governing facilities and programs. The Supreme Court has yet to address one of there cases, and its likely impact on standards of adequacy is unknown at this time.

Little agreement exists among the various standards-setting bodies and the courts on several critical issues.[23] Of particular relevance to this study is the question of the minimum square footage available for a prisoner's sleeping area.

On this question the following standards exist:

• National Advisory Commission on Criminal Justice Standards and Goals	80 sq. ft. per inmate
• Federal Bureau of Prisons	75 sq. ft. per inmate
• National Clearinghouse for Criminal Justice Planning and Architecture	70 sq. ft. per inmate
• United Nations Minimum Standards	65 sq. ft. per inmate
• American Correctional Association	60 sq. ft. per inmate

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* Palmigiaro et al. v. Garrahy et al. Civil Action No. 74-172 (August 11, 1977). This consolidated class action suit was brought against the Rhode Island Adults Correctional Institutions. Rhode Island has no jails, and pretrial detainees are housed in the State prison system. This was the first court decision to address the correctional system in its entirety.

- Gates v. Collier 390 F. Supp. 482 (N.D.Miss., 1975) 50 sq. ft. per inmate

There is, of course, no scientific mechanism for establishing standards of adequacy, and it will be noted that none of the above recommended standards are in agreement. Even with agreement on specific standards and a determination that they be fully implemented, a great many difficulties would remain. Many of the standards have major implications for both capital and operating costs, which, in turn, raise difficult questions regarding appropriate funding mechanisms.

In concluding this section, it should be noted that most of the policies that determine prison population lie beyond the sphere of the corrections administrator. A broad range of policies and circumstances culminating in sentencing decisions and parole practice primarily determine the size of institutional populations. The impact of the corrections administrator is both more indirect and limited to the following types of control:

- Control over the classification of prisoners
- Designation of facilities outside the prison cells for correctional purposes, such as prerelease centers
- Responsibility for some presentence reports to court
- Impact on sentencing conferences and other types of judicial training
- Operation of "good time" mechanisms
- Statutory authority with regard to the release of specified categories of prisoners*

Principal Findings

The final section of this chapter presents the principal findings of Phase I of the study. The full caveats associated with many of these findings are set forth in the respective chapters, and given the preliminary nature of this report it is important these be considered. The findings are reviewed under the following headings:

- Knowledge concerning prison population trends and prisoner movements

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* An example of such authority, in South Carolina, is discussed in Chapter II.

- The capacity of Federal and State correctional institutions
- Tentative measures of institutional adequacy; policy-blind and policy-informed projection findings; prison population and capacity 1977-82
- Prison population policy making

Knowledge Concerning Prison Population Trends and Prisoner Movements

While history may often provide a reasonable guide to the future, the instability of historical trends in State and Federal correctional institutions reflect two major discontinuities: a precipitous decline beginning in the early 1960s, and a substantial increase which began in 1973 and has continued through 1976, generating intense concern about the future of institutional corrections. Both shifts represent sharp, unexpected, largely unexplained phenomena that serve to confound any attempt to extrapolate from past trends.

This report begins the process of attempting to understand the causes and controls of these fluctuations in prison populations. While some partial answers are beginning to emerge, the question remains largely unresolved. We can identify some basic factors.

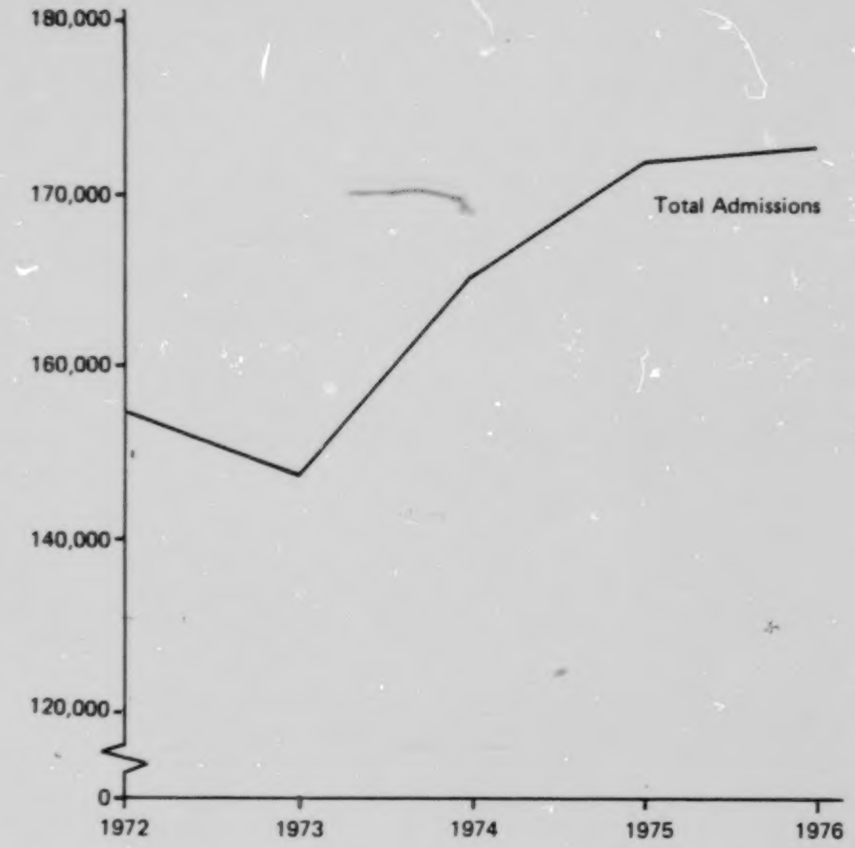
The most recent rise in prison population has followed a rise in intake, amounting to 38.8 percent over the last six years. To the extent that time served can be tested in our data, it appears that the role of this intake surge is more significant in accounting for the observed growth than any increase in average length of stay. As illustrated in Figure 1.2, the last year has seen a significant leveling in intake to State and Federal prisons: 1976 intake exceeded that of 1975 by only 1.3 percent. A continuation of this abatement would result in stabilization of the inmate population within the next two to three years, provided time served does not increase.

Projections of Present Trends

In this report, projections of the number of people imprisoned in any given year are viewed not as estimates of a natural phenomenon but as the results of particular combinations of policies, either considered or inadvertent, toward imprisonment and release. We begin asking about future populations on the assumption that recently established trends in such policies persist through the next six years. The problem is complicated by the fact that it is mathematically impossible for present intake and release trends to persist without changing the effective amount of time served.

Figure 1.2

Total Admissions to State and Federal Prisons
for Male Prisoners



Source: PC - 1 *

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* See Chapter III for description of survey instruments used by this study. The survey instruments, PC-1 and PC-2, are located in Volume II, Technical Appendix.

Projections I, II, and III (Figure 1.3) reflect the implications of assuming different portions of present policy to remain constant. Projection I, which may be viewed as a baseline for comparing other assumptions, is derived from the observation that during this century, imprisonment rates have not been generally characterized by long-term persistent trends, and that institutional capacity may soon impose effective limits to further growth in most States. Projection II assumes that somehow space will be found to accommodate new inmates continuing to arrive and depart at present rates, and that the growth recently produced by increased intake will continue unabated through 1982. An inevitable consequence of the assumptions of Projection II is that average time served will increase. Projection III is based on the assumption that inmates continue to serve the same amount of time through the next five years as they served in 1973-76, and that courts continue to sentence offenders to prison at the present volume.

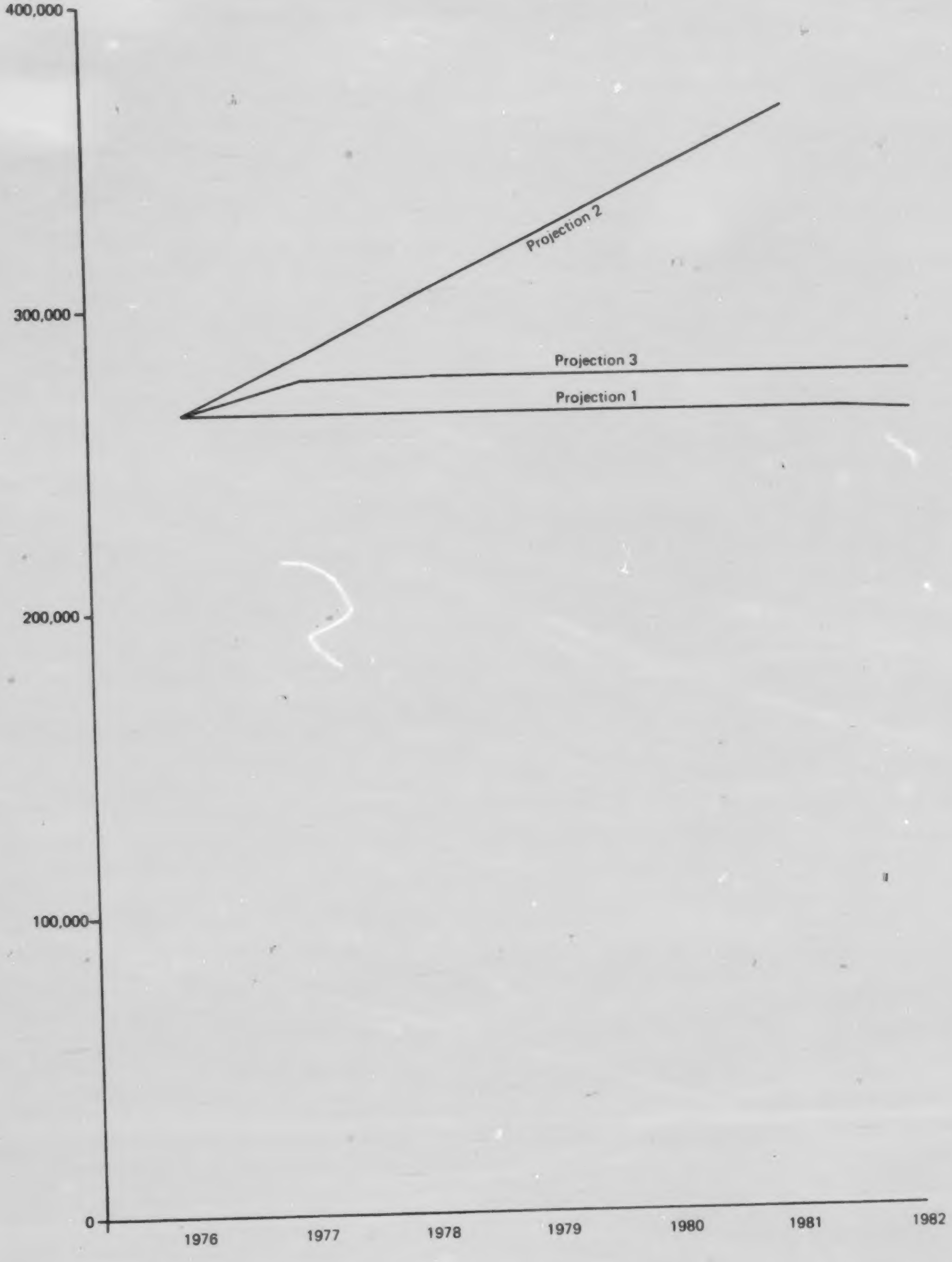
Projections of Policy Changes

While Projections I, II, and III examine some possible implications of present policy levels, they shed little light on the ways in which changes in these policies can induce changes in the prison situation. In Chapter VI we outline a few of the possible policies now under consideration, and explore their effects in a model which attempts to simulate the response of decisionmakers throughout a State criminal justice system. Figure 1.4 illustrates the results of this modeling exercise in one of the jurisdictions to which it was applied. The model shows considerable sensitivity to small changes in either direction in sentencing and release policies, but these changes take their full effect only if all parts of the system act in reinforcing directions.

Indirect policy effects are explored in two scenarios dealing with altered policy priorities. In States where crowding already exists, more stringent treatment for a specific sector of potential prison admissions, for example, persistent offenders cannot be made without adjustments elsewhere. In the Persistent Offender scenario, for example, the longer mandated prison stays for this category would substantially reduce the fraction of inmates subject to adjustment by parole boards. The system would be forced to respond, either by reducing average stays for the remaining population or by implementing another change at the sentencing juncture, to avoid both the crowding and inflexibility which would otherwise result from successive entering cohorts with long stays.

Figure 1.3

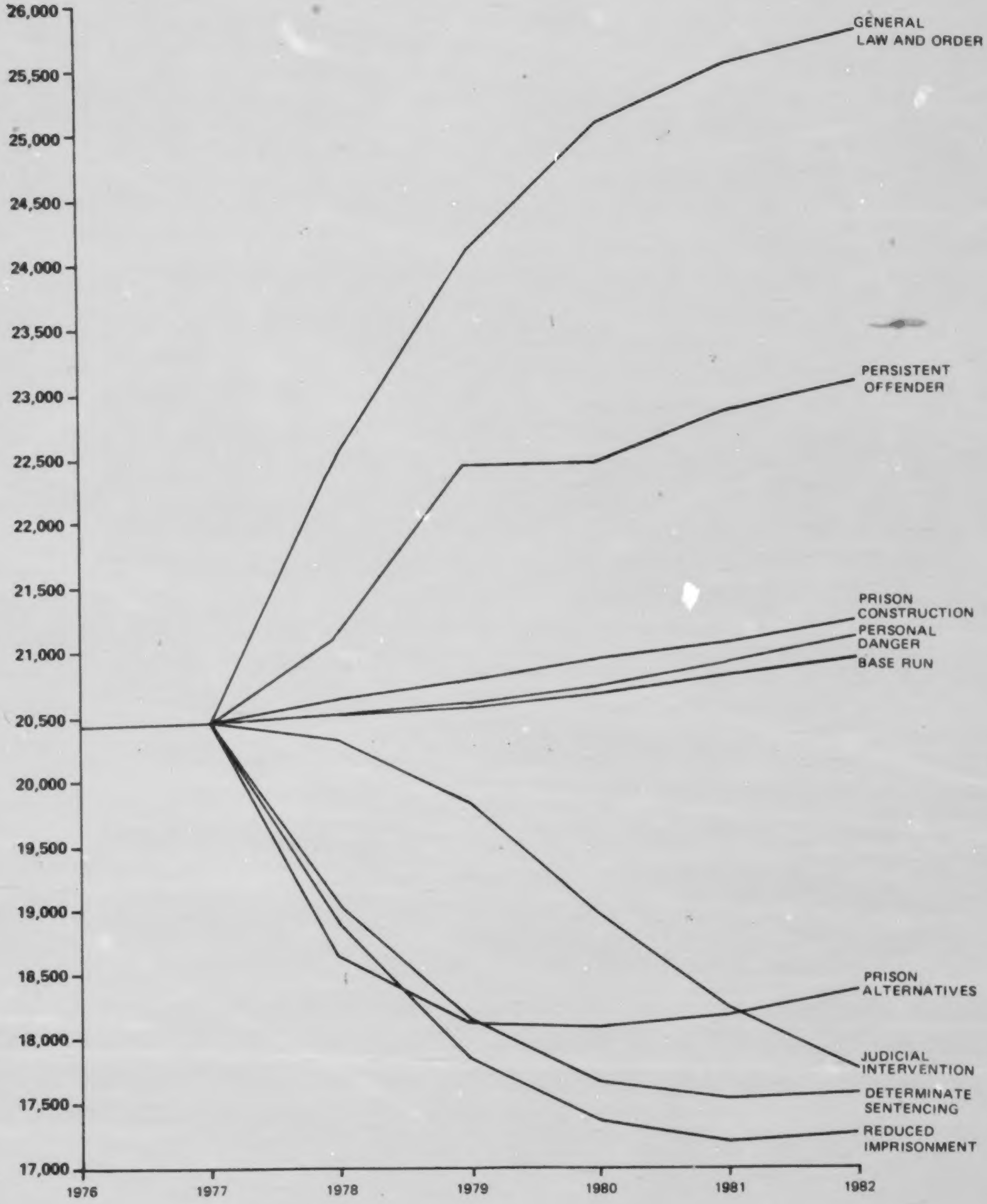
Inmates of State and Federal Prisons with Sentences Over One Year



Source PC - 1

Figure 1.4

CALIFORNIA – Dynamic Modeling Approach



A group of scenarios deal with external intervention in the State's correctional system through judicial regulation or the funding of special programs for either prison construction or alternatives to imprisonment. Each of these external forces introduces a major instability in both forecasting and correctional planning. In the event of new funds, an important question is the extent to which the additional programs replace existing ones, as opposed to serving as supplements. New construction can either add more net space or permit closing of obsolete facilities. Alternative programs intended to divert offenders from the prisons may serve instead to widen the net of imprisonment by increasing the total supervisory capacity of the system. The summary lesson of this modeling exercise is that policy decisions may have indirect and unintended consequences far beyond their nominal objectives.

The determinate sentencing simulations show the variability of the indirect effects from policies constraining the system's flexibility to grant release. In States where the legislature determines a sentence longer than current average time served for that offense, such an innovation would effectively raise, rather than lower, the prison population level. The central lesson to be gained from the analysis and simulations in Chapter VI is that general statements about broad classes of policy can be worse than misleading. In most cases, the effects of types of policies on prison populations will vary greatly across States. In one State, support for community corrections may reduce prison populations; in another, no effect may be felt at all. An emphasis on personal-danger crime may raise prison populations in a State, while declines may result in another. It must be recognized that just as there is literally no generalizable national problem, nor any national level model to predict what will happen, so there is no one national solution.

The Capacity of Federal and State Institutions and Current Prison Population

The results of the study's survey of correctional agencies and institutions provided considerable information on the nature and extent of prison crowding. On a nationwide basis the number of prisoners on June 30, 1977 as reported by survey respondents exceeded rated capacity by 20,665. Considerable variation exists among the four regions and the Federal System as is demonstrated in Table 1.1.

Table 1.1

Difference Between Rated Capacity and Prison Population by Region for 30 June 1977

Region	Rated Capacity (1)	Prison Population (2)	Difference (1) - (2)
Northeast	40,432	39,984	448
North Central	56,629	59,879	-3,250
South	100,657	111,476	-10,819
West	40,640	40,218	422
Federal	24,410 *	31,876 *	-7,466
Total	262,768	283,433	-20,665

Source: PC-1 and PC-2

* Includes an estimated 1500 beds and inmates in contracted prerelease facilities.

The data show the problem to be most severe in the South and in the Federal System. Of the total shortage of capacity 52.2 percent is located in the South and another 34.7 percent in the Federal System. The deficits in the North Central are much smaller, 12.8 percent, while the West and Northeast are reported to have an excess of rated capacity over prison population. These data are based on information reported by corrections agencies in the absence of any one standardized definition of rated capacity. Jurisdictions differ among themselves and over time in how rated capacity is calculated, and they tend to be influenced by financial, legal, and political considerations. It is possible that overstatements might occur in response to litigation, while understatements might reflect a need to support appropriations from the legislature. In all probability, survey respondents treat capacity information in a number of ways: (1) substituting operating for rated capacity, perhaps based upon an existing court order;* or (2) including the square footage gained in conversion of nonliving space into living space. The elusive nature of the rated capacity concept poses serious research problems with regard to making a comprehensive assessment of the nature and extent of prison crowding.

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* See, for example, the decision concerning rated capacity of Stateville Prison, Illinois in Chapter II.

A different approach to the measurement of prison crowding is to compare the number of prisoners in cells rated to hold one person. The survey found that Federal and State correctional institutions held 127,812, or 45 percent of the total prison population, in 126,684 cells rated to hold one person. Table 1.2 shows the breakdown on a regional basis.

By this second measure, the North Central, South, and Federal system emerge as having the most severe problem. The situation in the Northeast appears less severe than that suggested by the first measure.

It has been found useful to distinguish between the concept of rated capacity and adequacy standards. While rated capacity refers to a determination of the institution's ability to house prisoners, adequacy standards refer to the quality of the institutional environment. Phase I of the study has only been able tentatively to explore the many issues that arise with regard to adequacy, and the task of applying uniform standards of adequacy to correctional facilities has necessarily been reserved for Phase II. However some crude measures are possible at this stage. Table 1.3 provides a useful overview of the distribution of prisoners according to the size and age of institution.

From data in the above table it can be calculated that 42 percent of all prisoners in Federal and State institutions are in institutions more than half a century old, and that over half of all prisoners are in facilities that hold more than 1000 prisoners. The study also found, as reported in Chapter III, that 69 percent of all prisoners confined under maximum security are in prisons over 50 years old, and one-third are in prisons more than a century old.

Cell Space

Table 1.4 displays the average number of square feet inside cells for inmates in prisons throughout the four regions of the United States. In general maximum security institutions are characterzied by 10 to 15 percent less space than the average. The more cramped situation in these institutions is related to their being older, larger institutions designed to less humane specifications that are presently advocated.

Prison Population and Capacity 1977-82

Figures 1.5 through 1.8 display future construction which States report as currently expected to be available by 1982. Plotted

Table 1.2

Number of Cells Rated to Hold One Person and the Number of Inmates in These Cells by Region

Region	Number of Cells Rated to Hold One Person (1)	Number of Inmates in Cells Rated to Hold One Person (2)	Difference (1) - (2)	Percent of Total Population in Cells Rated to Hold One Person
Northeast	36,280	33,827	2453	84%
North Central	28,919	30,905	-1986	49
South	23,098	24,700	-1602	23
West	23,570	22,590	980	54
Federal	14,817	15,790	-973	47
	126,684	127,812	1128	45%

Source: PC-2

Table 1.3

Distribution of Prisoners by Size and Age of Institution

Size of Institution	Year of Construction of Institution			
	Prior to 1897	1875 to 1924	1925 to Present	Total
Fewer than 500	6%	10%	32%	22%
500 - 999	20	19	25	22
1000 and over	74	72	44	56
Total	100% (44,172)	100% (74,684)	100% (163,077)	100% (283,433)*

Source: PC-2 and secondary data

Table 1.4

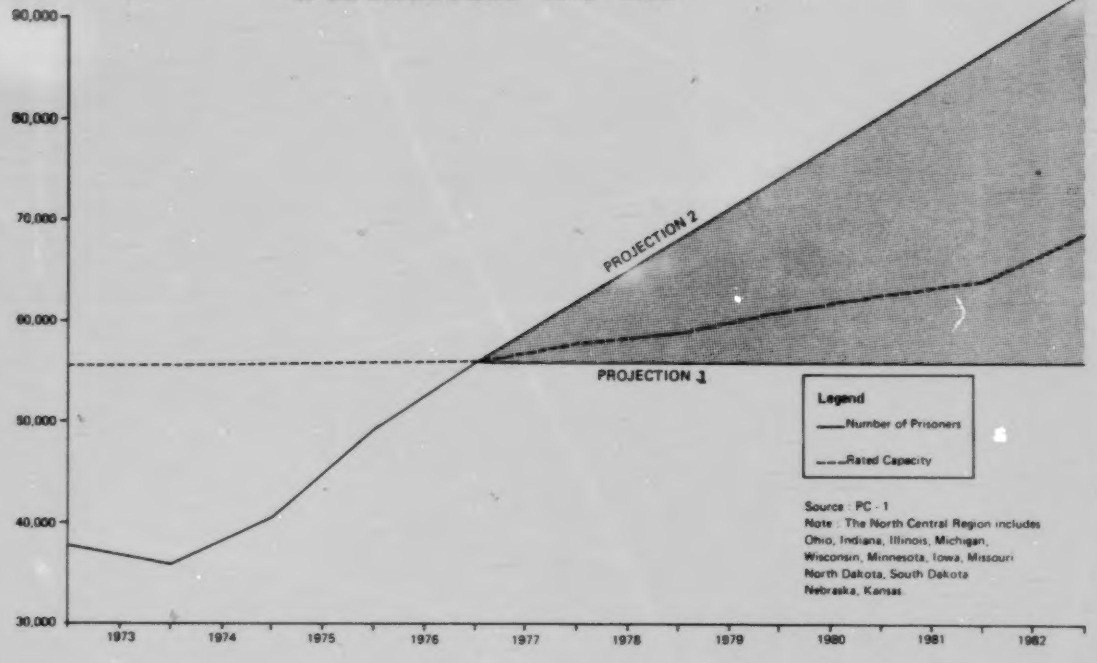
Average Square Feet Per Inmate in Cells

	Northeast	North Central	South	West	Total
Minimum Security	85.6	127.2	90.4	66.9	92.8
Medium Security	85.3	72.1	67.2	82.2	75.5
Maximum Security	60.1	49.1	67.9	72.0	58.8
Prerelease	138.1	75.1	56.3	--	93.8
All Institutions	73.7	59.0	69.8	75.6	68.0

Source: PC-2

Figure 1.5

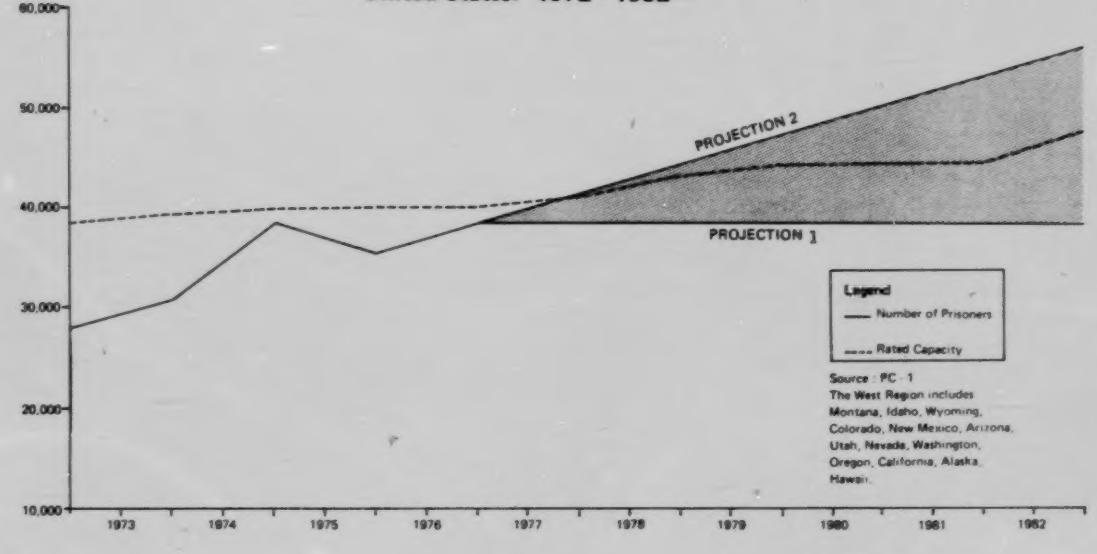
Number of Prisoners and Rated Capacity of the North Central Region of the United States: 1972 - 1982



Source : PC - 1
Note : The North Central Region includes
Ohio, Indiana, Illinois, Michigan,
Wisconsin, Minnesota, Iowa, Missouri
North Dakota, South Dakota
Nebraska, Kansas

Figure 1.6

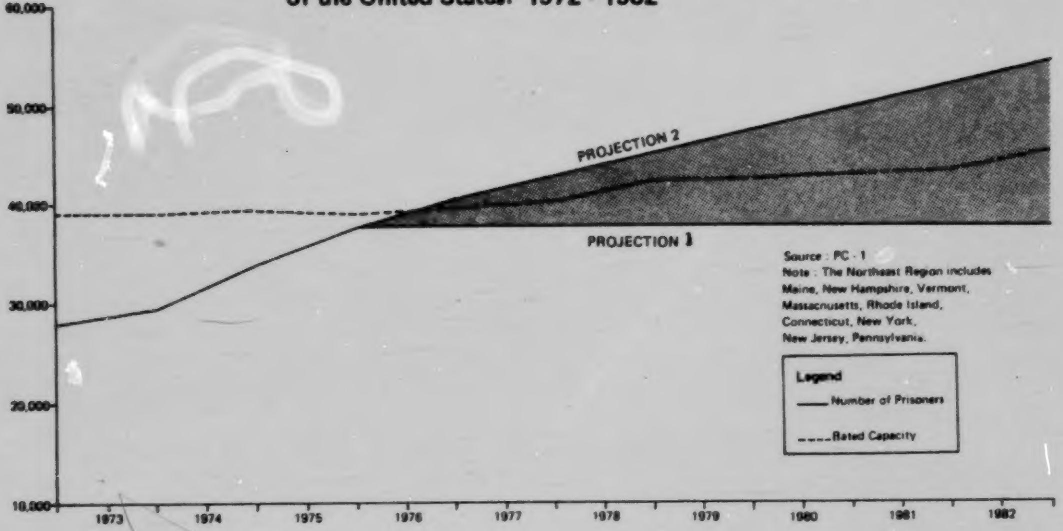
Number of Prisoners and Rated Capacity of the Western Region of the United States: 1972 - 1982



Source : PC - 1
The West Region includes
Montana, Idaho, Wyoming,
Colorado, New Mexico, Arizona,
Utah, Nevada, Washington,
Oregon, California, Alaska,
Hawaii.

Figure 1.7

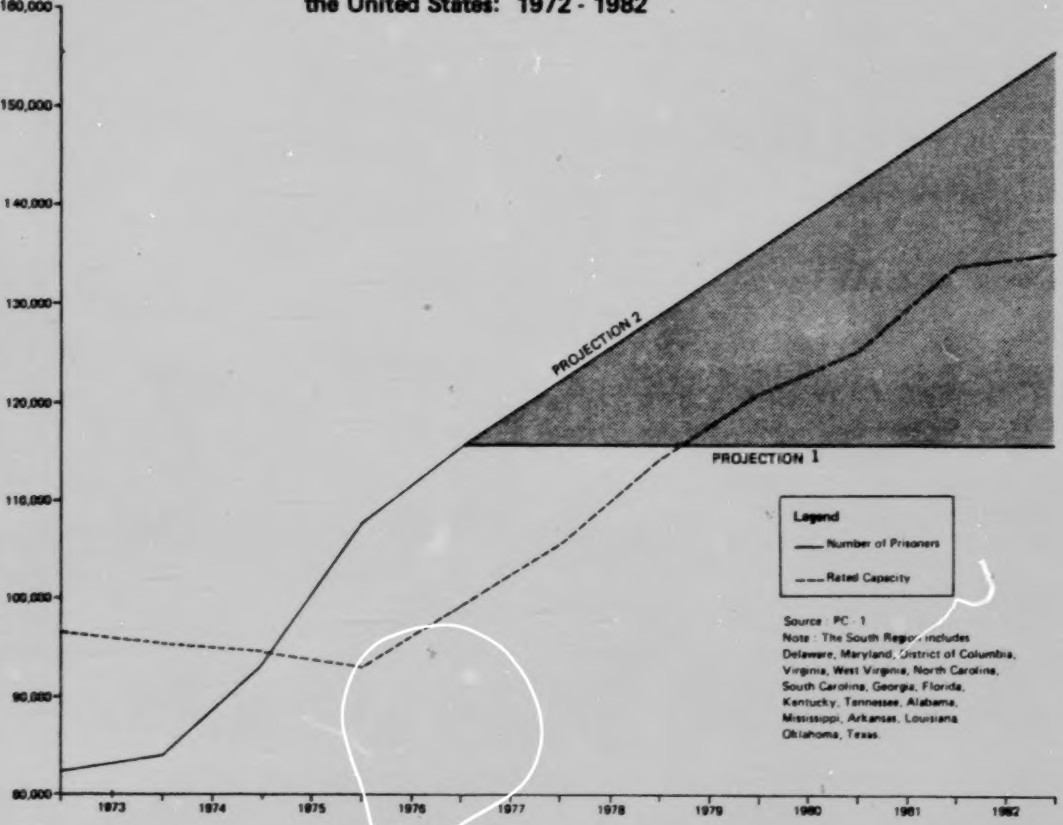
Number of Prisoners and Rated Capacity of the Northeastern Region of the United States: 1972 - 1982



Source : PC - 1
Note : The Northeast Region includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania.

Figure 1.8

Number of Prisoners and Rated Capacity of the Southern Region of the United States: 1972 - 1982



Source : PC - 1
Note : The South Region includes Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana Oklahoma, Texas.

on the same axis are the population projections reported in Chapter V. In every region construction plans will result in capacity rated to house at least present populations within the next two to three years. By 1982 planned construction will fall nearly in the center of the projection population range in every region. The only exception is the Federal prison system, where rated capacity is now said to be significantly below present populations, and is not expected to be materially increased over the next five years.

We emphasize that just as projections reflect the use of particular assumptions about the flow of prison inmates, estimates of future capacity are also based on States' assumptions regarding net additions in bedspace. In both cases, different assumptions might lead to quite different results. With these limitations in mind, additions currently planned may well exceed projected demand in 1982. If all reported construction, renovation, and acquisition plans are carried out by then, and if current rated capacity remains unchanged, rated capacity will rise to almost 325,000 beds by 1982. This number exceeds the present (January 1, 1977) population by 14 percent, and will accomodate all further growth anticipated by projection series III, or half the growth of series II.

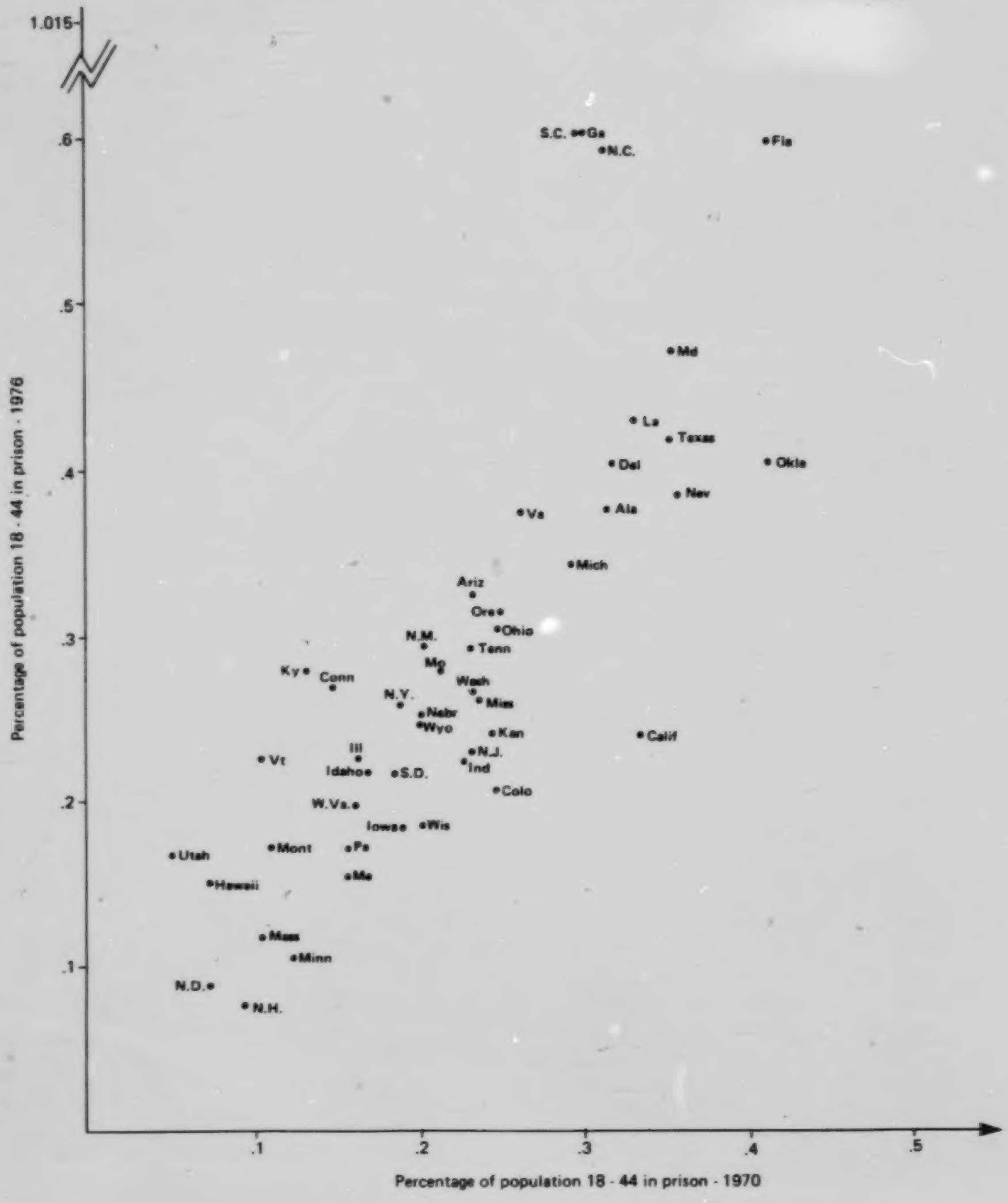
Prison Population Policy-Making

Finally, little evidence was found either during the four case studies or from other research that there was within any jurisdiction an explicit policy as to what should constitute an appropriate prison population. Substantial variation exists across States as to the level of prison population, either as a fraction of crime or of State population. The national diversity is illustrated by the Figure 1.9 which plots States according to persons in prison as a proportion of the State population aged 18-44 in the years 1970 and 1976.

The study has explored the possible impact of several policy-making areas on prison population. These vary from short-term measures directly addressed to the prison situation such as emergency measures to relieve crowding pressures to more long-range policies such as sentencing reforms. In the four case studies attempts were made to assess the relative impact of various such policies. A more ambitious exploration was undertaken through the Dynamic Modeling exercises which supports the view that prison populations are highly sensitive to policy decisions. There is, however, little indication that these decisions constitute coherent policy-making at either the State or Federal level of government as to what should constitute a prison population.

Figure 1.9

Percentage of Population 18 - 44 in Prison 1970 and 1976



This lack of comprehensive policy is especially apparent with regard to those factors that determine intake. These are usually locally controlled, whereas policies that address the post-intake phase are generally made at the State level. Given the predominant influence of intake on the size of prison population the need to structure this decentralized decision-making is obvious. Currently in most jurisdictions State government is, at best, only able to react to the situation with responsive policies. There appears to be very little indication of comprehensive proactive policy-making with regard to prison population.

Overview of Subsequent Chapters

The following overview provides a brief guide to subsequent chapters. Chapter II illustrated different responses by State governments to the prison crowding problem. By examining four States, attention is drawn to the very important differences that exist regarding both the nature of the problem and the approach to it. The case studies underline the importance of exploring such differences among States, and of attempting to design policies that match specific State situations.

Chapter III analyzes the data of the national survey of State and Federal corrections agencies and institutions carried our during the summer of 1977. With particular reference to the issues of capacity and adequacy it depicts the nature of the crowding problem in Federal and State prisons. An assessment of the state of the art is made and the rationale for the particular methods used in this study is presented. The assumptions underlying these methods, as well as their limitations are outlined. A number of methods besides those used were tested on data from the case study States. The chapter also begins exploring the relationship between policy and projections.

Chapter V presents the results from the two trend analysis techniques utilized during Phase I. These policy-blind methods assume, respectively, that intake and release rates continue at their present levels, producing constant growth in the inmate population; and that sentence length and admissions to prison persist at their present levels causing populations to cease growing after two years.

Chapter VI reviews the scope and limitations of the Dynamic Modeling technique which attempts to account for the differential impact of specific policy alternatives. The policy scenarios are described in some detail, along with the results of the modeling exercise that was applied to five States and to the Federal prison system. The exploratory nature of this exercise is emphasized.

Finally, Chapter VII outlines a number of key policy issues arising from the study which confront Federal and State government. Volume II of the report is a Technical Appendix, the contents of which include a summary of the methodology employed for surveying corrections agencies and institutions and an outline of a Markov modeling exercise to be applied in Phase II.

This is an appropriate place to refer to the study's future research agenda. The central tasks in Phase II of the study will be:

- To undertake a survey of the existing and future needs of local correctional facilities (primarily jails), and to assess the impact of revised sentencing practices on local offender populations.
- To refine the initial Phase I projection techniques, and to develop techniques for use by State and local jurisdictions to project their own correctional populations.
- To make an assessment of the capacity of Federal, State and local correctional facilities in a more precise manner than was possible in Phase I.
- To examine Federal, State, and local correctional facilities in terms of a standard measure of adequacy. This will allow a more refined approach to the problem of adequacy than found in this report.

The Phase II final report is scheduled for submission in March 1979.

I. NOTES

1. See P.L. 94-503, Section 402(c) of the *Crime Control Act of 1973*, as amended; see also *Congressional Record*, July 22, 1976, S. 512228.

2. *Pugh v. Locke*, 406 F. Supp. 318 (M.D. Ala. 1976); affirmed and remedied by U.S. Court of Appeals, 5th Circuit, September 16, 1977, No. 76-2269.

3. National Criminal Justice Information and Statistics Service, *Prisoners in State and Federal Institutions on December 31, 1976*. These states were Maryland, South Carolina, Arkansas, Virginia, Georgia, Florida, Alabama, Mississippi, Louisiana, and New Jersey.

4. See, e.g., Mayor's Coordinating Council on Criminal Justice, *Baltimore City Jail Overcrowding--Two Year Report*, April 1977.

5. National Criminal Justice Information and Statistics Service, *op. cit.*

6. As of December 31, 1976. Data supplied by California Youth Authority.

7. William H. Robinson, Phyllis Smith, and Jean Wolf, *Prison Population and Costs--Illustrative Projections to 1980* (Congressional Research Service, Library of Congress, April 24, 1977).

8. National Planning Association, Final Report to the Law Enforcement Assistance Administration, *A Nationwide Survey of Law Enforcement Criminal Justice Personnel Needs and Resources*, Volume VI: *Criminal Justice Manpower Planning* (December 9, 1976).

9. National Criminal Justice Information and Statistics Service, *Prisoners in State and Federal Institutions on December 31, 1962-76*.

10. The President's Commission on Law Enforcement and Administration of Justice, *Task Force Report: Corrections* (Washington, D.C.: Government Printing Office, 1967), p. 47.

11. National Advisory Commission on Criminal Justice Standards and Goals, *A National Strategy to Reduce Crime* (Washington, D.C.: Government Printing Office, 1973), p. 121.

12. *Ibid*.

13. James Q. Wilson, *Thinking About Crime* (New York: Basic Books, 1975). Ernest van den Haag, *Punishing Criminals: Concerning a Very Old and Painful Question* (New York: Basic Books, 1975).

14. Marvin Frankel, *Criminal Sanctions: Law Without Order* (New York: Hill and Wang, 1973). Andrew von Hirsch, *Doing Justice: The Choice of Punishments*, Report of the Committee for the Study of Incarceration (New York: Hill and Wang, 1976).

15. Walter C. Bailey, "Correctional Outcome: An Evaluation of 100 Reports," *The Journal of Criminal Law, Criminology, and Police Science*, 57 (1966), 153-160. Douglas Lipton, Robert Martinson, and Judith Wilks, *The Effectiveness of Correctional Treatment: A Survey of Treatment Evaluation Studies* (New York: Praeger, 1975).

16. David Fogel, *We Are the Living Proof: The Justice Model for Corrections* (Cincinnati: The W.H. Anderson Co., 1975). Pierce O'Donnell, Michael Churgin, and Dennis E. Curtis, *Toward a Just and Effective Sentencing System: Agenda for Legislative Reform* (New York: Praeger, 1977).

17. See, *Corrections Magazine*, special issues on overcrowded prison conditions, January 1976 and January 1977.

18. *Crime and Delinquency*, 18 (1972), 331-332).

19. See William E. Nagel, "On Behalf of a Moratorium on Prison Construction," *Crime and Delinquency*, 23 (1977), 154-172.

20. Communication from Alvin J. Bronstein, Executive Director, National Prison Project of the American Civil Liberties Union, July 1977.

21. See, e.g., Costello v. Wainwright, 18 CR.L. 2393 (January 15, 1976) when the Florida Department of Corrections was ordered to reduce overcrowding: and Gates v. Collier, 390 F. Supp. 482 (N.D. Miss. 1975) which is reviewed in Chapter 2.

22. Pugh v. Locke, 406 F. Supp. 318, 326 (M.D. Ala. 1976); affirmed and remanded by U.S. Court of Appeals, 5th Circuit, September 16, 1977, No. 76-2269.

23. "Prison Unit Issues a Set of Standards," New York Times, September 6, 1977. See also American Bar Association, Tentative Draft of Standards Relating to the Legal Status of Prisoners (1977).

II. PRISON POPULATION POLICY: STUDIES OF FOUR STATES

The case study method has been strategically important for the first phase of this research. It has four separate purposes: (1) developing detailed profiles of examples of the relationship between prison population and "capacity"; (2) providing the extensive data required for the modeling techniques used in Chapter VI; (3) obtaining historical and anecdotal information which deepened the research team's understanding of the many possibly relevant variables; and (4) supplementing the data on prison capacity and adequacy with detailed descriptions of prison facilities.

Almost without exception, all States experienced declining prison populations beginning in the early 1960s and sharply rising populations a decade later. Yet the case studies found a bearing on prison populations to differ in very important respects among States. This chapter describes the nature of the prison population problem and the approach taken to address that problem in four States: South Carolina, Illinois, Mississippi, and Iowa.

Given the time constraints on the Phase I study, accessibility was the single most important factor in selecting the four case study States. The quality of information was also an important determinant in selecting these States. With two of the States in the South, the case studies are not geographically representative of the United States. As will be seen in this chapter, however, problems facing these States' corrections systems are quite different, as are their approaches in dealing with them. Illinois has a single large urban area, with the remainder of the State exhibiting varying but modest degrees of urbanization, as well as rural areas. The selection of Iowa reflected our desire to include a State having a strong community-based component within its corrections system. Any tendency to make nationwide generalizations should be considerably tempered by the contrasting situations evident among the States reviewed in Phase I. The tables on the following pages have been included to provide a brief overview of the four Phase I case study States along several dimensions.

Table 2.1 shows the variation in incarceration rates for the age group 18-44. South Carolina stands out in this respect, with about 6 of 1000 people (ages 18-44) incarcerated under State custody, almost double the national average. As will be seen subsequently, this incarceration rate is in part explained by the fact that by law, the South Carolina Department of Corrections assumes custody of all persons sentenced to more than 90 days.

Table 2.2 exhibits degree of urbanization and race distribution for the case study States. Only Illinois is more highly urbanized than the nation as a whole. Illinois for overall median family income and median family income for white families (Table 2.3). The median family income for black families in the two midwestern States is higher than the national median, while the reverse is true of the two Southern States. Unemployment rates in 1970 reveal a pattern which has continued to the present day: higher unemployment rates for blacks than whites. Judging from the data in this table, our case study States appear to over-represent the problem of black unemployment.

As can be seen in Table 2.4, reported crimes and crime rates per 100,000 people increased dramatically between 1970 and 1975, for the four case study States and the nation as a whole. Illinois clearly exhibits growth for both violent and property categories both lower than the national average and those of the other States studied. Variations in the interpretation of Uniform Crime Reporting classification and scoring conventions by local law enforcement agencies are well known, but these variations alone would not appear to account for the differences between Illinois and the other States or the nation.

Each State profile in this chapter starts by examining the recent trend in incarcerated population in the State and the context of that trend. This is followed by a description of each correctional system's ability to accommodate the population it receives. In this situation a corrections agency is to some extent the passive sector of criminal justice, having to deal with the consequences of decisions made elsewhere. It is important, however, not to overlook the options and initiatives that are open to corrections agencies, such as the use of good and honor time, the reclassification of prisoners and other examples that appear in the following pages. Plans for dealing with anticipated population trends are also covered in this section. Finally, the State profiles examine major factors that have affected or can be

Table 2.1

Rates of Incarceration: 1976

	Illinois	Iowa	Missis-sippi	South Carolina	U.S.
State Population (thousands)[a]	11,229	2870	2354	2985	214,659
Persons Incarcerated under State Custody (12/31/76)[b]	9651	1956	2237	6988	280,677
Prison Population/Thousand Population[c] at Risk (age 18—44)	2.26	1.83	2.59	6.01	3.04

Table 2.2

Demographic Summary: 1970[d]

	Illinois	Iowa	Missis-sippi	South Carolina	U.S.
Percent Urban	83	57	44	48	73
Percent Nonwhite	14	1.5	37	30	12
Percent Nonwhite Males 15—24	1	<1	3	3	1
Percent White Males 15—24	7	8	5	7	7
Percent Nonwhite Males 15—44	3	<1	6	5	2
Percent White Males 15—44	17	18	12	15	17

Table 2.3

Economic Summary: 1970[e]

	Illinois	Iowa	Missis-sippi	South Carolina	U.S.
Median Family Income	10,959	9018	6071	7621	9590
Median Family Income/White	11,314	9040	7578	8761	9961
Median Family Income/Nonwhite	7921	7124	3209	4450	6308
Unemployment Rate	3.3	2.8	4.6	2.6	3.9
Unemployment Rate/White	2.9	2.8	3.6	1.9	3.6
Unemployment Rate/Black	6.6	7.8	7.2	4.5	6.3

NOTES

[a] U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, No. 307, "Population Profile of the United States: 1976," U.S. Government Printing Office, Washington, D.C., 1977.

[b] Prisoners in State and Federal Institutions on December 31, 1976, Advance Report 1977, Law Enforcement Assistance Administration, Justice Department.

[c] U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, No 626, "Projections of the Population of Voting Age for States: November 1976," U.S. Government Printing Office, Washington, D.C., May 1976.

[d] U.S. Department of Commerce, Bureau of the Census. United States Census of Population: 1970, Vol. 1. Characteristics of the Population; pt. 1, U.S. Summary; pt. 15, Illinois; pt. 17, Iowa; pt. 26, Mississippi; pt 42, South Carolina.

[e] Ibid.

Table 2.4

Crime Trends: 1970-75[7]

	Illinois		Iowa		Mississippi		South Carolina		U.S.	
Reported Crime	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Violent 1970	52,006	467.8	2241	79.3	3974	179.3	7387	285.2	731,402	360.0
1975	61,269	549.7	4039	140.7	7411	315.9	14,412	511.4	1,026,284	481.5
% Change	17.8%		80.2%		86.5%		95.1%		40.3%	
Property 1970	208,852	1879.2	38,307	1356.0	15,167	684.1	46,153	1781.6	4,836,795	2380.5
1975	538,558	4832.8	108,142	3768.0	49,147	2094.8	116,385	4130.1	10,230,282	4800.2
% Change	57.9%		182.3%		224.0%		152.2%		111.5%	

Source: Federal Bureau of Investigation, Uniform Crime Reports: 1970, 1975 (Washington, D.C.: Government Printing Office, 1971, 1976); rate is per 100,000 of the population.

expected to affect population. In short, the focus of the chapter is largely on how prison population policy is determined at the level of State government.

South Carolina

Recent Population Trend

In the past three years, there has been dramatic growth in the number of people incarcerated under custody of the South Carolina Department of Corrections. Figure 2.1 illustrates this trend vividly: After growing slowly fron 1842 inmates in 1955 to 3300 in 1972, average daily population went to 7346 for the first quarter of 1977. In order to understand the factors underlying this phenomenon, brief reference must first be made into the history of corrections in South Carolina.

Brief History

Prior to the passage of a General Assembly Act in 1866, establishing a State penitentiary for felons, all persons sentenced to imprisonment in South Carolina were held in county prisons and jails. In 1885, an Act was passed allowing these prisoners and others to be used for work on county roads. Several county/State jurisdictional shifts followed until 1914, when the Legislature granted county supervisors the right to remove prisoners from State to county jurisdiction. Throughout the twentieth century, corrections in South Carolina has been characterized by this dual system: State and autonomous county/local facilities. Unless sentenced under the Youthful Offender Act of 1968,* or specially ordered by the judge to the State penitentiary as a repeat offender, a convicted felon could either be retained by the county for public works use or be sent to the State.

In 1960 the State Department of Corrections was created. During the 1960s State and local officials began to recognize problems inherent to a dual prison system: absence of centralized planning and programming; inefficient use of space and other resources; inequitable distribution of rehabilitative services; and security and administrative problems arising from a fairly steady growth in Department of Corrections inmate population.

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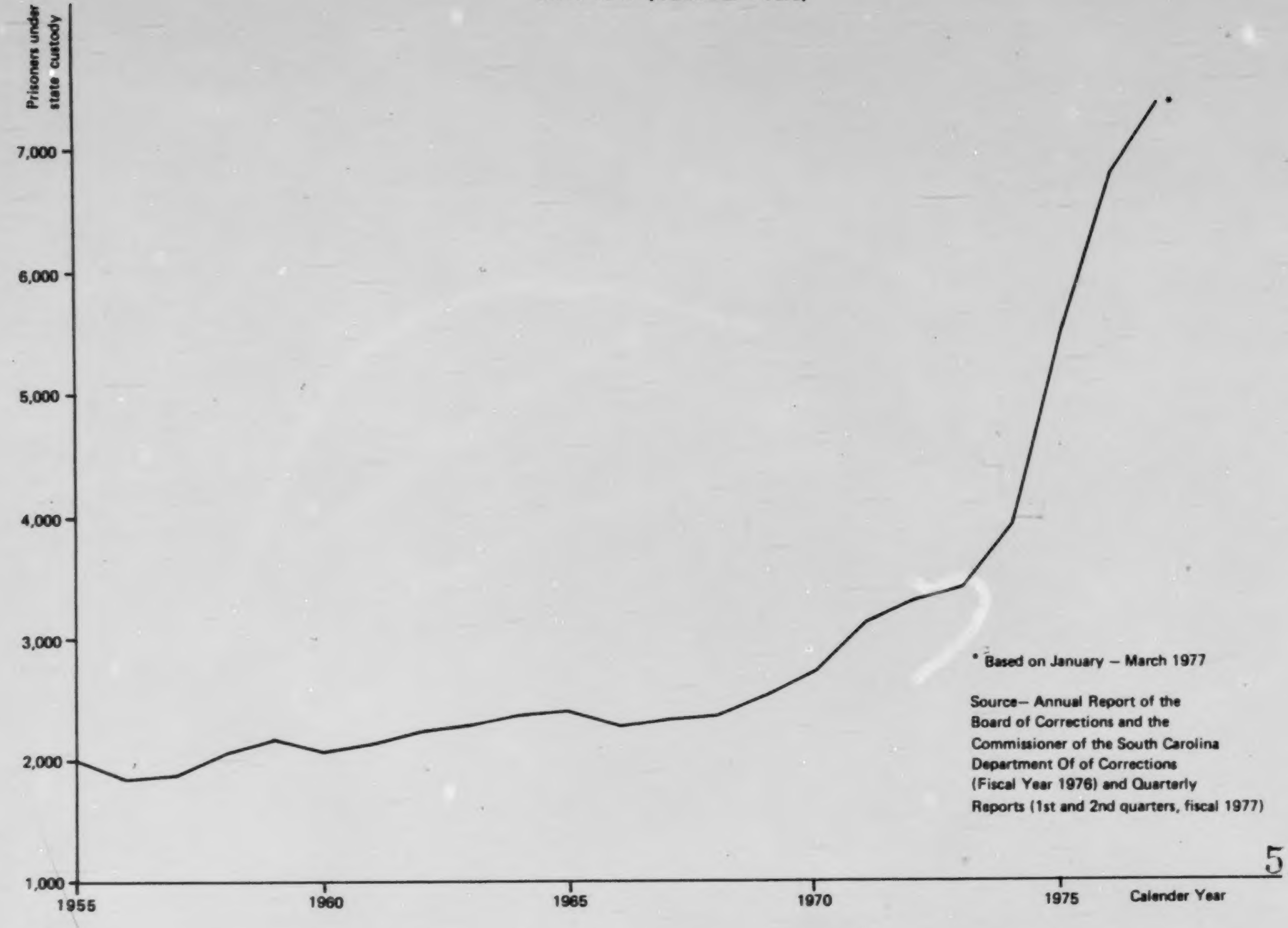
* See below.

Figure 2.1

Prisoners Under State Custody
1955-1977 (Calendar Years)



* Based on January – March 1977

Source– Annual Report of the
Board of Corrections and the
Commissioner of the South Carolina
Department Of of Corrections
(Fiscal Year 1976) and Quarterly
Reports (1st and 2nd quarters, fiscal 1977)

Key Factors Affecting Population Statistics Since 1973

Beginning in 1973, three events had significant impact on the incarcerated population under State custody.

Steps Taken Toward the Elimination of the Dual Prison System

In 1972, the Governor's Management Review Commission called for a comprehensive study of the adult correctional system. The prescribed study was subsequently co-sponsored by the Governor's Office of Criminal Justice Programs and the Legislature's Corrections System Study Committee. Completed in May 1973, the study called for a "model adult corrections system" for the State and the elimination of the dual prison system. Implicit in this model was the premise that the State Department of Corrections would resume operation of suitable local prison facilities, perhaps after minor remodeling, through leasing or "designated facility" arrangements.*

Even prior to legislative endorsement of most of the Commission's recommendations, the process of eliminating the dual prison system had begun. In May 1973, Florence County closed its prison, transferring ten inmates to the South Carolina Department of Corrections. In September, Aiken County closed its work camp and transferred its ten inmates to the State. In November, Spartanburg sent 82 inmates to the South Carolina Department of Corrections. This process of removing inmates from county jurisdiction and placing them with the State continued in other counties through 1974 and 1975, and by June 30, 1976, the South Carolina Department of Corrections gained 556 prisoners through this method.**

State Jurisdiction of All Prisoners Sentenced to More Than Ninety Days' Imprisonment

Shortly after steps were taken to implement the model correctional system, the South Carolina Legislature, in its General Appropriations Act of June 1974, placed all offenders sentenced to more than 90 days' imprisonment under the custody of the South Carolina Department of Corrections, and required that counties maintain custody over those serving lesser sentences. This measure was signed by the Governor on June 28, 1974 and the transfer of prisoners from county to State jurisdiction described above also reflects, in part, compliance with this stature by some counties. More significant than the direct transfer of prisoners, however, was the sentencing, to State facilities, of offenders newly entering the judicial process, who previously might have been assigned to a county prison system. The dramatic rise in average daily population since 1974 in part reflects the impact of the 90-day statute. Unfortunately the data were not available to estimate the number of individuals sentenced to over 90 days who, prior to the 1974 statute, would have been under county custody.*

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* Designated facilities are locally operated but agree to house prisoners under State custody.

** Bedspace acquired through this process is discussed below.

Increase in Court Activity

The third major event that affected South Carolina corrections was a sudden increase in circuit court processing in 1975. Referring to Figure 2.2, the number of new defendents coming before the courts increased by 19 percent from 25,954 in 1974[1] to 30,808 in 1975.[2] In that same time period, however, the number of defendants whose cases were disposed of rose 58 percent from 19,933 to 31,555, and the number of inmates the Department received from the courts rose by 91 percent in these years, from 2493 to 4764. These statistics reflect a general increase in court activity and productiveness. After the large increase in the disposition of cases in 1975, the reduction in backlog continued through 1976. There were 9572 cases pending at the end of 1974, 6923 at the end of 1975, and 6028 at the end of 1976.

Using the percentage of defendants disposed of who were ultimately placed under custody of the South Carolina Department of Corrections, a rough estimate can be obtained of the proportion of the 2271 increase in intake between 1974 and 1975 that was attributable to the 90 day statute. Assuming similar conviction rates and rates of sentencing to prison in 1974 and 1975, the number of people sentenced to the custody of the Department would have been 3947 in 1975, an increase of only 1454. Under these assumptions--neither of which would appear to be obviously invalidated by the 90-day law--about 64 percent of the increased intake in 1975 was due to increased court activity. As indicated before, the law's

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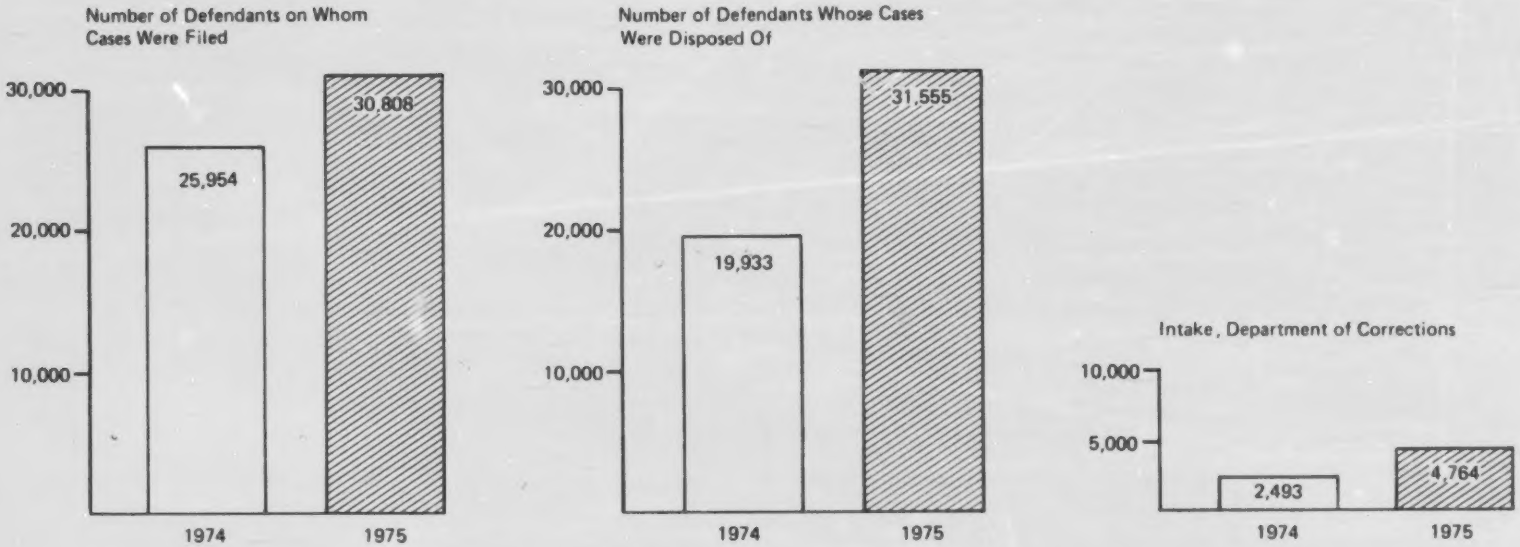
* According to a recent survey conducted by the Department in developing its Masterplan (1975-1982), less than one percent of prisoners under State custody serve 90 days or less.

Figure 2.2

Comparison of Defendant Processing in South Carolina (1974-1975)



Source : Criminal Docket Reports, Office of The Attorney General, South Carolina impact on average daily population cannot be assessed without time served data (or at least sentence length distribution data), which were not available.

Capacity: Present and Future

Rated Capacity

The South Carolina Department of Corrections operates 32 correctional institutions. The agency, which was created in 1960, has a governing board and an appointed commissioner. Most of the 32 institutions, ranging in age from two to 108 years, are owned by the State, although 11 are leased from other units of government. As of March 31, 1977, these facilities had a combined rated capacity of 4481 inmates.[3]

The South Carolina Department of Corrections facilities vary widely in size, design, population, and rated capacity, as shown in Table 2.5. The three largest, Central Correctional Institution, Kirkland, and Manning, are all medium-security institutions. The minimum-security institutions are smaller, and many are located in former county prisons. The Department attempts to assign inmates on the basis of age and seriousness of criminal record. One facility houses women exclusively; one exists for elderly or handicapped male inmates, which also includes one dormitory for women on work release; and three house young males.

In addition to bedspaces in owned or leased facilities, the Department, since 1974, has utilized bedspaces in county jails and work camps, known as "designated facilities;" these are expected to conform to Department standards on physical conditions. The inmates placed in such facilities are technically under the Department's jurisdiction and can be transferred to a Department facility. In many instances, inmates are assigned to "designated facility" status for dual purposes: to help the space demands of State institutions and to provide inmates for work detail in certain counties.

Despite the 4464-inmate rated capacity of its facilities, it was insufficient for the South Carolina Department of Corrections' average daily population in January-March 1977 of 7346*. All but seven of its institutions were overcrowded at that time, and the system as a whole was functioning at approximately 47 percent over rated capacity. Two of the smaller institutions had average

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* According to the Quarterly Report, 770 of these individuals were being held in designated facilities.

Table 2.5

South Carolina State Correctional Institutions

Institutions and Centers	1977 Age	Security Level	Rated Capacity (Mar. 31,77)	Population (Jan-Mar 77)
Nonregionalized Institutions and Centers				
Central Correctional Institution	9	Medium	1100	1652
Kirkland Correctional Institution	2	Medium	448	854
Lexington Correctional Center	3	Minimum	40	60
MacDougall Youth Correctional Center	11	Minimum	240	374
Manning Correctional Institution	14	Medium	300	428
Maximum-security Center	9	Maximum	80	94
Reception and Evaluation Center	10	Maximum & Medium	180	185
North Sumter Correctional Center	3	Medium	50	94
Wateree River Correctional Institution	85	Minimum	240	426
Women's Correctional Center	4	Minimum	168	314
Appalachian Correctional Region				
Blue Ridge Community Prerelease Center	5	Minimum	115	162
Cherokee Correctional Center	3	Minimum	56	74
Duncan Correctional Center	4	Minimum	40	53
Givens Youth Correction Center	4	Minimum	76	97
Hillcrest Correctional Center	3	Minimum	60	120
Intake Service Center	3	Maximum & Medium	42	70
Northside Correctional Center	3	Minimum	30	47
Oaklawn Correctional Center	3	Minimum	60	113
Piedmont Community Prerelease Center	7	Minimum	90	85
Travelers Rest Correctional Center	3	Minimum	50	91
Midlands Correctional Region				
Aiken Youth Correction Center	2	Minimum	240	195
Campbell Prerelease Center	2	Minimum	100	110
Catawba Community Prerelease Center	6	Minimum	70	66
Coastal Community Prerelease Center	7	Minimum	62	75
Employment Program Dorm*	0	Minimum	50	49
Goodman Correctional Institution	7	Minimum	84	85
Greenwood Correctional Center	3	Minimum	48	105
Laurens Correctional Center	3	Minimum	40	76
Lower Savannah Community Prerelease Center	3	Minimum	45	46
Palmer Prerelease Center	2	Minimum	50	62
Walden Correctional Center	26	Minimum	98	117
Watkins Prerelease Center	13	Minimum	129	171
Other**	-	-	-	26
TOTAL, STATE INSTITUTIONS			4464	6576

*The Employment Program Dorm, opened on January 7, 1977, is physically located at Goodman Correctional Institution.

**Assigned to the South Carolina Criminal Justice Academy, SLED Headquarters, the Governor's Mansion.

Source: Classification Division's Monthly Reports to the Board of Corrections, January-March 1977, and the Quarterly Statistical Report, Third Quarter, Fiscal Year 1976.

populations exceeding 200 percent of design capacity. One, with a design capacity of 48, had 105 inmates; another, with a design capacity of 60, had 120 inmates.

Emergency Measures Taken

The result has been to crowd inmates into any space that can be utilized. That is, cots or beds have been added to the wards to accommodate the population increase, thereby decreasing the amount of space per inmate. In facilities with cells or cubicles, inmates have been doublebunked to expand capacity. Overcrowding can be explained most easily in terms of square feet of sleeping space per inmate. Work and prerelease centers have the most space: 69.2 square feet. The average allotment in medium security is 38.7 square feet, while the Columbia Reception and Evaluation Center has only 25.9 square feet of sleeping space per inmate. In Cellblock 1 at the Central Correctional Institution, only approximately 21 square feet are available per inmate.[4] With two or even three inmates crowded into an area designed for one, conditions have reached appalling proportions.

In some facilities, program spaces or day rooms have been converted to sleeping areas. As a consequence there is insufficient space for counseling, recreation, and visiting in most facilities. Apart from cutbacks in programmatic activity, it is clear that these type circumstances may jeopardize security as well. Even the two reception and evaluation facilities (Columbia and Greenville) have been affected severely. Since all persons committed to South Carolina Department of Corrections custody pass through one of the reception centers, these facilities are the first to experience increases in inflow from the courts. In 1975, when court dispositions rose to their highest level, the Department was forced to detain, in the reception centers, hundreds of inmates who had completed reception and evaluation processing, because no bed space was available in the institutions to which they were assigned. In July 1975, according to South Carolina Department of Corrections statistics, 1053 inmates were backlogged in the reception and evaluation process, awaiting placement.

The Department has also made regular use of mattresses on corridor floors for sleeping accommodations, in addition to doubling and tripling the number of inmates per cell. Throughout the months when circuit courts are in session, offenders sentenced to State prison are also backed up in local jails (not designated facilities) before they can enter the reception and evaluation process. From mid-September 1976 until August 1977, an average of 350 persons per day were backlogged in jails awaiting assumption of custody by the Department of Corrections. On several occasions, counties have obtained court orders to force the Department to remove these sentenced offenders from local mails.[5]

Future Plans

In 1976 the Department of Corrections adopted a ten-year Capital Improvements Plan, which examined the current population, both overall and by custody categories, and facilities and resources available.[6] This plan was rooted in forecasts of prisoner population developed by the South Carolina Division of Research and Statistical Services. One forecast was based on data for inmates in Department facilities only, whereas the other took into account all inmates in the Department's jurisdiction, including those in designated facilities.

The Division used an econometric regression model* which projected Statewide numbers of inmates on the basis of socioeconomic variables. The model also included a variable to capture the effect of the mid-1974 statute which places offenders sentenced to more than 90 days under State custody. Calibrated from a data base which contained the period of dramatic growth (1974-1977), the model projected populations within State facilities of 9276 inmates by 1982 and 12,500 inmates by 1986. The Capital Improvements Plan explicitly addressed the projected 12,500 inmate population, regardless of its time of occurrence. Based on this projection, a construction and renovation plan was proposed.

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* The model expressed the ratio of the prison population for a given month, to that of the previous month as a linear function of:

- The month-to-previous-month ratio of the general population;
- The month-to-previous-month ratio of the number of people employed;
- A dummy variable to capture the effect of the 90-day sentencing law. For the first two variables in the list above values beyond the present are themselves projections. Moreover, if the dummy variable is "on" for all years past 1974, it will generate new cohorts of prisoners each year that reflect the 90-day sentencing law. If average time served by these prisoners is less than 10 years--which is probably the case--the actual impact of the 90-day law will have reached an equilibrium range which the model will continue to reflect the impact of the law on projections.

The Department's immediate construction program includes an addition to an existing facility and renovations or improvements to others, providing 144 new beds. Two new 528-bed facilities are scheduled for construction in 1978, yielding 1200 new bedspaces by 1979. Between 1979 and 1981, 2352 more bedspaces are planned, and 4512 more are scheduled for completion by 1986. Thus, a total of 8064 new bedspaces, at an estimated cost of 116 million dollars, is planned over the next ten years. The plan also recommended the elimination of 924 beds over the next ten years, yielding a net gain of 7140 beds. Combined with the present capacity of 4481, this plan falls 379 beds short of the projected 12,000 population. Approximately 37 million dollars had been appropriated by the legislature for construction, but funds were temporarily frozen when a ceiling was placed on the State's bonded indebtedness. Approximately 21 million dollars has since been released. However, construction of new facilities is not scheduled to begin until May 1978, with occupancy anticipated in early 1980.

Key Factors Affecting Population

Probation

Data describing the distribution of offenders by sentence type were available only for 1974. These are reproduced in Table 2.6. YOA in the table refers to the Youthful Offender Act, involving a separate paroling authority for offenders aged 18-21 (discussed below). Examining the first six categories which, but for vehicle theft, correspond to the crime index as defined by the Federal Bureau of Investigation, and excluding the Youth Offender Act category, we find that 16 percent receive straight probation. If 50 percent of those in the "Time or Fine" category serve time, sentences to State prison (or designated facility) constitute 73 percent of sentences. The housebreak and larceny category, viewed by the FBI as the least "serious" of the six, exhibits only a slightly smaller spread, with 19 percent receiving probation and 69 percent sentenced to prison.

Parole

According to State law, an offender sentenced to prison for thirty years or less is eligible to apply for parole after serving one third of his sentence. There are some exceptions. Those inmates serving longer sentences or life imprisonment were formerly eligible in ten years; however, since 1976, twenty years must be served prior to eligibility. A first offender sentenced under the Youthful Offender Act for an

Table 2.6

Distribution of Sentences by Convicted Offense
Statewide, 1974

CONVICTED OFFENSE	TYPE OF SENTENCE							
	Time[a]	Time and Fine	Time or Fine	Fine	Probation	YOA[b]	Other[c]	TOTAL
TOTAL	6,584	279	6,921	1,536	2,177	1,686	882	20,065
Murder	43*	--	--	--	--	--	2	45
Manslaughter	163	--	--	--	2	--	6	171
Rape	30	--	--	--	--	1	--	31
Armed Robbery	183	--	--	--	4	33	2	222
Assault & Battery of High and Aggravated Nature and With Intent to Kill	324	4	47	69	132	35	25	636
Housebreaking and Larceny	734	3	30	54	201	447	64	1,533
Forgery	332	7	14	70	95	73	32	623
Drug Law Violations	745	55	1,758	454	389	182	218	3,801
DUI/DUS	916	114	3,234	246	114	7	121	4,752
Weapons-Carrying	142	15	553	83	74	6	42	915
Auto Breaking and Theft	175	12	35	14	77	130	18	461
Other	2,797	69	1,250	546	1,089	772	352	6,875

[a] Includes 1 death sentence and 53 life imprisonments.

[b] Includes convictions against defendants sentenced under the Youthful Offender Act.

[c] Includes suspended, restitution, sealed, deferred and unorthodox sentences.

*Includes one death sentence and 42 life imprisonments.

Source: Attorney General for the State of South Carolina, Annual Report, Summary of Criminal Prosecutions for Calendar Year 1974.

indeterminate term must serve the minimum time for which he was sentenced. Convicted armed robbers must serve a minimum of seven years. In this case, Departmental policy regarding good time can reduce the period served to less than seven years.

With the exception of those special sentences just discussed, the Board automatically reviews each offender sentenced to more than one year when one third of his sentence has been served. According to the Division of Research and Statistical Services, the percentage of cases receiving parole increased from 63 percent to 69 percent during fiscal years 1972-74. However, by fiscal year 1976, when the inmate population was increasing most dramatically, only 854 paroles were granted, 58 percent of 1448 applications.

Youthful Offender Act

Under the Youthful Offender Act a person aged 18-21 (or up to 25 years old with the offender's consent) can be sentenced to an indeterminate sentence. The flexibility offered by this Act, far greater than by regular paroles, enabled the Department to counter a portion of the growth in population over the last few years. Under the Act, a sentence to prison is indeterminate, permitting the Department to exercise its own discretion regarding the release of inmates. Twice since 1973 the minimum time to be served was reduced by the Department: from 13 to 10 months and from 10 to 7 months.

Every year since 1973, an increase has occurred in the total number of persons sentenced under the Youthful Offender Act; most notably, the 60 percent increase in 1975. Twice the Department of Corrections has released a group of inmates sentenced under the Youthful Offender Act, prior to their scheduled review dates. The first special release, for which the Department obtained the governor's order, freed 200 youthful offenders; the second allowed youthful offenders convicted of crimes other than burglary and violent crimes to be reviewed two months before their scheduled release dates. Finally, Departmental changes in minimum time served allowed youthful offenders, except those convicted of multiple property offenses or crimes against persons, to be released earlier than would otherwise have been possible. A Department study found that, as of December 31, 1975, there were 522 persons sentenced under the Youthful Offender Act in Department of Corrections institutions. Without the policy revisions in minimum time, the Department estimated the total would have been 1085.

Court Processing

According to 1974 data compiled by the Office of the Attorney General, there was considerable variation among circuit courts in case processing. In 1974, the percentage of defendants whose cases were not processed varied among courts from 4.8 percent to 36.3 percent. Fifty-four percent of criminal defendants pleaded guilty in one court, 92.1 percent in another. Although the data required to determine what percentage of guilty pleas were due to plea bargaining are not available, the percentage of cases disposed of by trial ranged from 1.5 percent to 12.8 percent. South Carolina criminal session judges display tremendous discretion in case disposition and sentencing. An offender convicted of sexual assault, for example, can be sentenced to prison from five to 40 years.

At the request of the Chief Justice, a comparative study of sentencing patterns among judges is currently being prepared by the Attorney General's Office. The Chief Justice is reported to have stated that judges should not take prison overcrowding into account when sentencing.[7]

Legislative Measures

With regard to legislative activity, two laws have recently been enacted that may further increase prison population. One is a mandatory 10-year sentence for armed robbery, with a minimum of seven years to be served prior to parole eligibility. As of April 22, 1977, 1156 people (or 15.2 percent of Department of Corrections inmates) were serving time for robbery.*

The second law changed the minimum time served to 10-20 years, for sentences in excess of 30 years; this may also increase population pressure. The Department estimates that, due to this law, populations under its custody will by 1998 be 1450 more than it would have been otherwise (no estimates were available on the impact by 1982). Prior to enactment of this legislation, prisoners sentenced for these long periods served an average of 11.5 years prior to parole.

The legislature has predominantly viewed the prison crisis as a need for more bedspaces. One exception is recent legislation to remove public drunks from local jails in South Carolina. According to informed observers, the only measure in the next legislative session that may bear on prison population is the establishment of community residential centers for offenders who must pay restitution. It is unclear whether this program would serve significant numbers of people who would otherwise be confined in State prisons.

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* Data on prisoners convicted of armed robbery were not available.

Other

The Department has operated a work release program since 1966. Until mid-1977, inmates on work release were required to live at a minimum-security facility and commute to work. At that time, the Legislature authorized the South Carolina Department of Corrections to institute an "extended work release program," in which an eligible inmate could live and work in the community for the last three to six months preceding parole or release. A total of 978 inmates were admitted to this program in 1976, and there is a long waiting list of eligible inmates.

Department researchers have roughly estimated the impact of extended work release. Assuming that program participants will move from work release centers in the community an average of five months early and that approximately half of current work release participants will qualify for the program, an estimated 135 inmates will be on extended work release after the program has been in effect for five months. The regular work release program could be expanded if extended work release proves successful for certain types of offenders. Naturally, both programs are limited by considerations of safety and community response.

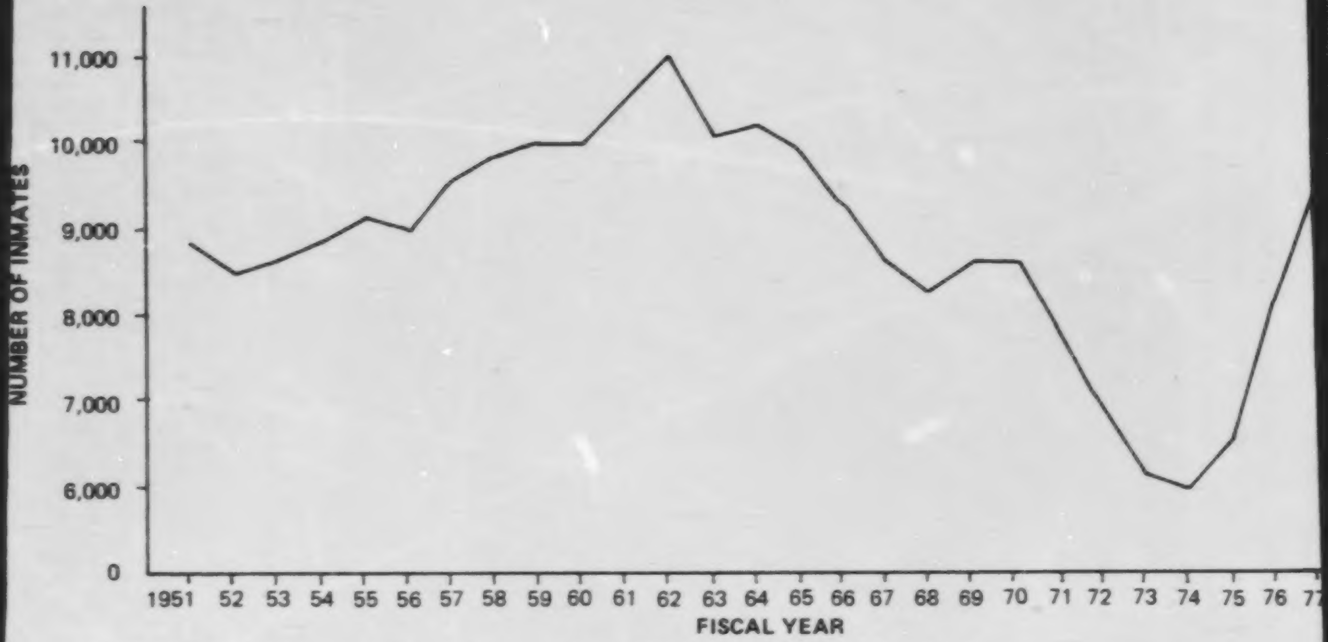
Illinois

Current Population Trend

In tracing the chronology of events directly relevant to the present prison population in Illinois, 1950 is an appropriate starting point. Average daily prison population had grown steadily over the previous decade from 5818 in fiscal year 1951 to 9987 in fiscal year 1960, a 72 percent increase. Reaching a peak of 10,981 in fiscal year 1962, the average daily population, after a temporary increase during 1969-70, reached a new low of 5982 in fixed year 1974. Since then, the average daily population has rapidly increased resulting in a count of 10,383 on July 29, 1977. Figure 2.3 illustrates the trend.

Figure 2.3

Trend of Average Daily Population, Illinois 1951-1977



SOURCE: Illinois Department of Corrections, Census of Institutions population and employees Adult Division (Monthly Reports), 1951 – 1977

Population Decline: 1972-1974

The explanation for the decline in prison population between fiscal years 1962 and 1974 appears to be rooted in shifts in parole policy during that period and in the decision not to take custody of misdemeanants serving sentences of less than six months.[8] Throughout the decade of 1950 and until 1962, the number of paroles granted annually remained under 1500. In 1962, the number of paroles increased by about one thousand, establishing a new plateau lasting for eight years in the 2400 range. A temporary drop occurred in 1969, followed by a return to even higher levels through 1974 (about 2700). During the period from 1962 to 1974, new admissions from court each year were approximately 4500. About half of the dramatic shift in the number of paroles granted in 1962 was brought about by the paroling of inmates who, under previous practices, would have served out their sentences. The fraction of inmates serving full sentences declined from 51 percent in 1961 to 23 percent in 1965 and remained at the lower level through 1968.

Aside from higher levels in the number of paroles granted, as described above, there were two other contributing factors to the 1974 low in prison population. First was the decline from 33 percent to 22 percent in 1973 in the number of parolees returned for technical violations. Second was the cessation of the practice of accepting, under State custody, certain misdemeanants serving sentences of less than six months. New admissions to the institution which housed these prisoners declined from over 2700 in 1969 to under 900 in 1974.[9]

Population Rise: 1974-1977

Although average daily population, computed for each fiscal year, did not rise until fiscal year 1975, factors driving the population upward began to operate earlier. Several indices were computed using available data to illustrate these factors.

- The number of felony arrests grew by some 14,000 from 1972 to 1973 and by another 13,000 in the following year.[10] Using the ratio of the number of felony arrests to the crime index as a rough measure, arrest activity kept pace with increases in the crime index in the crime index at a relatively constant value of 0.13.*

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* Arrests are actually for offense categories comprising the crime index of the Uniform Crime Reports of the Federal Bureau of Investigation, whose number, by and large, corresponds to that for felony categories.

- Using the ratio of the number of felony cases filed to the number of felony arrests as an index, we find an increase in value from 0.34 to 0.48 from 1972 to 1975, the latter being the largest value for that ratio in 11 years. Prosecution activity more than doubled during this period, from roughly 17,000 to 37,200 felony cases filed.[11]

- The number of felony defendants disposed of increased at about the same rate as did felony cases filed, from 16,400 in 1972 to some 37,200 in 1975.

- The percentage of felony defendants convicted leveled off during 1972-1975 at about 44 percent after steadily declining from 71 percent in 1961. However, since the number of persons convicted increased from about 7400 in 1972 to nearly 17,400 in 1975.

- After declining from 67 percent in 1961 to 40 percent in 1972, the percentage of felons sentenced to prison stabilized through 1975 resulting in an increase from 3000 intakes in 1972 to some 6500 in 1975.

Another event that appears to have been a key factor in driving average daily prison population upward after 1974 was the implementation of the Unified Code of Corrections in 1972. Although the available data are insufficient to fully assess the 1972 Code's impact on prison population, there is reason to believe that the Code contributed to the rapid rate of increase over the past two years. Table 2.7 shows, for 10 percent random samples of men received in reception and classification in 1970 and 1974, the following distribution of minimum sentences (rounded to the nearest year).

Most notable in this table is the reversal in the relative frequency in minimum sentences of three and four years. This reflects, in large measure, the minimum four-year sentence under the 1972 Code for violent crimes (predominantly armed robbery, an offense for which a minimum sentence of two or three years was previously more typical). The full effect of this difference has yet to be realized.

In sum, the analyses above suggest that the rise in the State's prison population over the past three years reflects (1) the choice and ability of the State criminal justice system to "keep pace" with rising crime levels and (b) longer minimum sentences imposed for certain offense categories.

Table 2.7

Distribution of Minimum Sentence Length for Prisoners Entering in 1970 and 1974

Minimum Sentence	Percentage Receiving Minimum Sentence 1970	Percentage Receiving Minimum Sentence 1974
1	40	39
2	27	18
3	12	6
4	5	19
5	6	6
6+	10	12

Source: J. Flanagan. "Tentative Population Projections Fiscal Year 77," Report to the Illinois Department of Corrections, Adult Division (September 1975).

Capacity: Present and Future

Rated Capacity

The Illinois Department of Corrections currently operates nine adult institutions. The youngest of these institutions is six years old; seven are over forty years old. Created by statute in 1970, the Department has custody over both adults and juveniles committed through the judicial process. The Adult Division and the Juvenile Division are distinct organizational entities, although upon reaching the age of 17, juveniles can be transferred to the Adult Division on order of the court. Misdemeanants sentenced to six months or more may be committed to the Adult Division from counties without suitable jail facilities.*

The combined rated capacity of adult institutions in Illinois on July 14, 1977 was 10,650. Table 2.8 summarizes present age, security level, rated capacity and population, by institution. Rated capacities indicated agree with the values reported in our survey (see Chapter III), but are substantially above those assigned by the National Clearinghouse Report for Criminal Justice Planning and Architecture (NCCJPA) in its 1976 Illinois Corrections Masterplan (Pre-Final Draft). The National Clearinghouse Report placed capacities of Joliet, Menard, and Stateville

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* A count on June 30, 1977 recorded two juveniles and 269 misdemeanants in the custody of the Department of Corrections, Adult Division. Corrections Information System, Illinois Department of Corrections. Birthdays were not recorded in 198 cases.

(three of the four maximum security institutions) at about half the value given by the Department of Corrections, and gave Pontiac a capacity of 1277 compared to 1800 assigned by the State. The difference appears to be largely accounted for in terms of double- and sometimes triple-ceiling, which is reflected in the Department's figures and not in those of the NCCJPA. In the absence of square foot measurements and standards given in terms of size, it is not appropriate to call either capacity figure the "correct" one. By Department criteria, two of the facilities are marginally overcrowded; by NCCJPA standards, there is a prison "crisis" in the State. This example highlights the elasticity of rated capacity as a measure.

Table 2.8

Illinois State Correctional Institutions

Prison	1977 Age	Security Level	Rated Capacity (7/14/77)	Population (7/28/77)
Joliet (male)	116	Med.	1250	1139
Pontiac (male)	105	Max.	1800	1840
Menard (male)	98	Max.	2650	2594
Menard Psychiatric (male)	98	Max.	300	272
Stateville (male)	57	Max.	2700	2676
Vandalia (male)	53	Min.	700	681
Dwight (female)	45	Med.	300	286
Sheridan (male)	26	Med.	325	327
Vienna (male)	5	Min.	625	568
TOTAL			10,650	10,583

Sources: Age and Security Level - National Clearinghouse for Criminal Justice Planning and Architecture.

Rated Capacity - Memorandum dated July 15, 1977 from Richard B. Gramley, Coordinator of Program Services, Adult Division, to Phillip Shayne, Chief of Program Services. "Present capacity," described in the memorandum as a "control figure for the distribution of residents based upon current program, staff and housing capabilities at each institution," was listed at 10,450.

Population - Department of Corrections count, July 28, 1977.

Future Plans

The multivolume Illinois Corrections Masterplan, prepared by the National Clearinghouse For Criminal Justice Planning and Architecture, was completed in August 1976 and became public in the spring of 1977, prior to submission of the final draft to the Department of Corrections. The report took a systemwide approach, and divided its recommendations into three broad categories: administrative policy changes, statutory changes that would require legislative action, and changes that would necessitate major funding commitments. Among the recommendations made were unification of the probation system, increased use of diversion and of partial residential programs such as work release, and a new system of standardized sentencing with a five-year maximum for nondangerous offenders. Through use of these strategies to reduce imprisonment, the plan calls for an inmate population of 5700 by 1985.

The Department of Corrections has rejected the Masterplan, criticizing it for not adequately considering the effect of changes in the courts and other components of the system on corrections or political and financial realities.[12] On August 1977, it announced instead its own building and renovation projects. The governor of Illinois approved Department plans to remodel and rehabilitate three correctional centers--Dwight, Pontiac, and Sheridan--during Fiscal Year 1978, providing an additional 350 beds. At Pontiac and Sheridan, nonbedspace will also be remodeled. In December 1977, the Department plans to convert a hospital facility situated 30 miles north of Springfield. To be known as Logan Correctional Center, it will provide the Department with 700 additional beds. The total cost of the Department's renovation plan is estimated to be close to 10 million dollars. These plans and costs are summarixed in Table 2.9 below.

Table 2.9

Year	Institution	Beds Added	Cost
Fiscal Year 1978	Dwight Correctional Center	100	$1,279,000
Fiscal Year 1978	Pontiac Correctional Center	150	2,286,300
Fiscal Year 1978	Sheridan Correctional Center	100	1,467,000
Fiscal Year 1978	Logan Correctional Center	700	4,572,000
TOTAL		1050	$9,604,300

In addition to the planned renovation, new correctional institutions may be constructed in anticipation of further increases in population. In June 1977, the Governor announced that he had ordered sites selected for two new medium-security prisons, each of which will house approximately 750 inmates, for a total cost of approximately 50 million dollars. Building funds have not yet been appropriated and will be considered by the Illinois General Assembly in October. Various areas of the State are competing for selection as sites for new institutions, where construction, and later, prison jobs will be created. Even if appropriations are made, construction may take a minimum of five years.

Key Factors Affecting Population

Probation

The probation function in Illinois is highly decentralized, resting largely with the 21 circuit courts covering 102 counties. Moreover, adult and juvenile services may be organized under separate or joint administrations. These and other organizational complexities result in 70 different probation systems in the State. Statistics compiled by the Administrative Office of the Illinois Courts indicate that approximately 61 percent of the 17,000 adults convicted of felonies in 1975 received probation as one component of their sentence.*

Parole

The adult Field Services Division of the Department of Corrections is responsible for providing parole services, as well as work release and community center residential services. The Parole and Pardon Board, in its role as the parole-granting authority, controls the departure of prisoners from State correctional institutions. In 1975, 52 percent of 4589 inmates applying for parole (either initially or after continuance) were released under parole supervision.

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* Three sentencing categories involve probation: with periodic imprisonment, with discretionary conditions, and without discretionary conditions. These were combined to derive the figure cited.

Other Factors

In addition to parole services, the Department of Corrections operates two types of residential facilities: work release centers and community centers. There are currently 13 such centers in operation, with a total capacity of 377 (352 male, 25 female). As of July 14, 1976, 357 individuals were residing in these centers.[13]

There are few pretrial or similar diversion programs in Illinois, and it does not appear that any of the existing mechanisms will substantially affect the population level of the State correctional institutions.

The current Illinois prison population is close in magnitude to that experienced in 1962, which showed an average daily population of well over 10,000. As described above, parole was the primary vehicle for reducing the population to a more manageable level. Since general parole policy clearly influences the number of persons granted parole (and perhaps the number applying for parole as well), it would appear possible to turn to parole once again to return prison population to more desirable levels.

Probation offers another possible means of bringing about a reduction in prison population. As noted above, the probation function in the State is highly decentralized and is subsequently not uniformly executed across jurisdictions. The Illinois Supreme Court Committee on Criminal Justice is presently surveying probation departments, with the plan to cover all departments. Once this is complete, the possible sharing of information about organization, procedures, records, etc.--not to mention the possibility of centralization--may lead to more efficient use of probation such that it might alleviate the problems of a growing prison population.

Proposed Legislation

There are two criminal code revisions before the Illinois Legislature, either of which could have a strong impact on the corrections population. Both would eliminate much of the judicial discretion allowed under the current code.

The first of these, House Bill 1500, is partially based on a plan entitled the Illinois Justice Model, promulgated by the previous governor. This bill was passed by the Illinois House but has yet to win Senate approval. It has been opposed by the current governor, who introduced a separate proposal which was passed by the Senate. The latter bill would create a new class of felony offenses and mandate a minimum six-year sentence with no parole. No compromise was reached on the two alternate code revisions before the end of the regular 1977 General Assembly session, and a special session is scheduled for October 1977. Table 3.9 shows the present system of indeterminate sentencing and the proposed House Bill 1500 sentencing structure.

According to the House Committee report, the median sentence actually served by felons released from 1971 to 1974 was:

Murder	11.7 years
Class 1	4.3 years
Class 2	2.2 years
Class 3	1.8 years
Class 4	1.7 years

The Committee then estimated that with "day-for-day good time" credits, which House Bill 1500 also provided for, the effective determinate sentence based on median terms would be:

		Change from 1971-74 Average
Murder	15.00 years	+3.30
Class 1	7.75 years	+3.45
Class 2	2.50 years	+0.30
Class 3	1.75 years	-0.05
Class 4	1.00 year	-0.70

It is important to note, however, that these estimates do not consider the variety of reactions that judges and prosecutors may have to the sentencing changes and their ways of exercising the discretion that they maintain.

Two potentially significant House Committee recommendations were:

- Provide for doubling the maximum ranges within a felony class for habitual offenders. The minimum range for habitual offenders will be one half the maximum term. The habitual offender provision will apply for a third conviction of a felony where at least one of the prior convictions was the same class or a greater class felony than the third conviction.

- Provide that the judge may impose consecutive sentences where more than one offense occurred during the same act or series of acts and where extreme violence was used or severe bodily harm occurred.

More Judges in Cook County

Cook County has a significant impact on the administration of criminal justice throughout Illinois and particularly on the State corrections system. Since early 1977, 15 new judges have begun to hear criminal cases in Cook County, bringing the total to 39. This change could have a tremendous effect on the prison inmate population. Prior to April 1977, the Cook County Circuit Court had a backlog of approximately 10,000 defendants awaiting case disposition, and the backlog was growing. In April, the number of defendants disposed of exceeded the number of new case filings, and currently the backlog is decreasing by 10 or 11 defendants per day.[14] Using the constant rate of 10 per day, and assuming 260 days of court activity per year, 2600 more defendants could be removed from the backlog during the next year. In 1975, approximately 55 percent of defendants sentenced in Cook County Circuit Court Criminal Division were committed to the Illinois Department of Corrections.[15] If this proportion remains stable, the clearing up of court backlog could result in 1430 additional admissions to the Department of Corrections.

The increase in criminal court case flow could also increase the State correctional population in two other ways. The Chicago Crime Commission statistics show an increase in the rate of conversion of arrests to charges since the new judges were selected. This rise may indicate that prosecutors are more eager to prosecute cases becauses they will be heard sooner. It may also be a result of the Statewide increase in the number of prosecutors, and the implementation of legislation requiring State attorneys to be full-time.

One final effect of the speedier case processing should be noted. The time that a Department of Corrections inmate serves at a State prison is inversely related to the age of his case at the time of disposition. Approximately 40 percent of Cook County defendants do not make bail and remain in jail until their sentences are credited with the time already served in jail. As cases are processed more quickly and detention time decreases, the amount of time actually served in a State prison will increase, raising the prisons' average daily population. The ultimate effect of these changes is, at the moment, a matter of speculation and concern.

Mississippi

Due to the unique set of circumstances relating to Mississippi corrections in recent years, the case study material has been organized somewhat differently from those of the other three states. We begin in the following subsection with a description of Mississippi's single correctional institution at Parchman and a review of relevant events of the past decade. Intervention on the part of a Federal court and the response of the State's corrections system constitute the focus of this review. The effect of these activities on the population of Parchman is discussed next, followed by plans for increasing inmate capacity. Other factors affecting the inmate population at Parchman are presented to conclude the case study.

We note at the outset that, unlike the other three case study States, most of our finding for Mississippi were derived from interviews with State officials and officials of the state corrections system. Little numerical data existed for analyzing the role of court activity and decisions in prison population.

The Mississippi State Penitentiary at Parchman

The seventy-one-year-old Mississippi State Penitentiary at Parchman is the State's only facility for adults. Located 130 miles northwest of the State capital at Jackson, the 21,000-acre facility is the largest known prison farm. It contains minimum, medium, and maximum security units, and all felons sentenced to imprisonment in the State are committed there.* walled structures. Inmates live in widely scattered camps that The appearance of Parchman is very different from traditional walled structures. Inmates live in widely scattered camps that are connected by 23 miles of dirt road. The operative camps are self-contained units, and interaction among inmates is largely confined to competitive sports events. In the past each camp was characterized by the type of work performed by its residents.

As a result of a classification system recently imposed by a Federal court, some camps now house specific types of offenders. Of the 1650 prisoners on June 30, 1977, only 244 occupy single-cell units, and most of these inmates were in maximum-security custody; the remaining 1406 were assigned to dormitories. The dormitories in each camp occupy a one-story brick structure with a room for 60 inmates in each of several wings. Beds are a yard apart and contain personal property lockers beneath them. The wings join at a common area, where a dining hall, recreation area, meeting room, and one camp has an alcoholic treatment facility are located, initiated in 1968.

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* As of July 30, 1977 there were 489 convicted felons backed up in county jails because of a Federal court order imposing a ceiling on the prison population.

The nonresidential facilities at Parchman are of two types: those that are necessary to the farming industry (e.g., a feed mill, a cotton gin, several barns, and a warehouse) and those typically found within the walls of correctional institutions (e.g., a hospital, training facility, prerelease center, vocational school, and bookbindery). In addition, there are a number of houses that inmates can reserve for weekend visits with their families. Parchman was the first institution in the nation to permit conjugal visits.

Court Intervention

During the last ten years many of the policies and practices that determine the size of the prison population were changed, eventually resulting in a substantial drop in the inmate count at Parchman at a time when correctional facilities in most States were experiencing serious overcrowding problems.

Parchman has had a national reputation for brutality, inhumane living conditions and virulent racist practices.[16] Change, however, began to occur in 1965 when some 250 civil rights demonstrators from Natchez were detained at Parchman's maximum security unit, and brought a suit in Federal court.[17] This action led to further litigation and on February 8, 1971, the Gates v. Collier[18] case commenced, with the plaintiff-inmates, alleging that their confinement at Parchman deprived them of their Eighth, Thirteenth, and Fourteenth Amendment rights, and seeking an injunction against certain practices and conditions for a declaratory judgment that this deprivation of their rights and the presence of such inhumane practices and conditions were unconstitutional.

The case precipitated a series of unusual events. No trial was held. All parties agreed to waive presentation of evidence in court and to submit into the record the pleadings, depositions, interrogations and responses, offers of proof, factual summaries, photographs, reports, and other documentary evidence already assembled. Additionally, then Governor William Waller conceded the alleged unconstitutional practices at Parchman.

Although a judgment was never entered in the case, Judge Keady, Chief Judge of the U. S. District Court for the Northern District of Mississippi did issue his findings and conclusion of law. Those most directly relevant to the present study are listed below.[19]

- The housing units at Parchman are unfit for human habitation. Facilities for the disposal of human waste at all camps are shockingly inadequate and present an immediate health hazard. Contamination of the prison water supply caused by inadequate sewerage has led to the spread of infectious diseases.

- The medical staff and available facilities at Parchman fail to provide adequate medical care for the inmate population. As a result many inmates have not received prompt or efficient medical examination, treatment, or medication. Inmates are often discouraged from seeking needed medical attention by punishing those who on examination appear to be healthy.

- Except for those confined in the Maximum Security Unit, all inmates are housed in open barracks known as "cages" and are thus at the mercy of each other. The risk of personal injury created by cage confinement is increased by (a) defendant's failure to classify inmates according to the severity of their offenses, (b) the prison's reliance on inmates rather than trained civilian guards as custodial personnel, and (c) the failure of prison authorities to confiscate the weapons many inmates are known to possess. Also the evidence is replete with instances of inhumanities, illegal conduct and other indignities visited by inmates who exercise authority over their fellow prisoners.

- Inmates at Parchman relegated to the punishment side of the Maximum Security Unit have often been placed in the "dark hole" without clothes, hygiene materials, or adequate food for periods of 48 to 72 hours. During such confinement the cell is not cleaned nor is the inmate permitted to bathe.

Court Ordered Closings

Since the finding and conclusion of law re Gates v. Collier were presented, a series of specific orders decreed to close eight camps within Parchman between July 1, 1976 and July 1, 1977.

Table 2.10

Summary of Court Ordered Prison Camp Closings in Mississippi 1975-Present

Number of Camps	Bedspaces Closed	Scheduled Closing Date	Compliance
2[a]	302	July 1, 1976	yes[c]
2[a]	297	January 1, 1977	yes[c]
1[b]	134	April 1, 1977	yes[d]
1[b]	127	May 1, 1977	yes[d]
1[b]	120	June 1, 1977	yes[d]
1[b]	76	July 1, 1977	yes[d]

a) Order of the U.S. District Court for the Northern District of Mississippi, Greenville Division, August 7, 1975, re Gates v. Collier.

b) Amendatory Order of the U.S. District Court for the Northern District of Mississippi, April 4, 1977, re Gates v. Collier. Two camps were given extensions on closings initially scheduled for April 1, 1977, of 30 and 60 days, respectively.

c) Order of the U.S. District Court for the Northern District of Mississippi, March 24, 1977, re Gates v. Collier.

d) Telephone interview with Acting Warden Presley, Mississippi State Penitentiary.

Scheduled closing dates and bedspaces lost as a result of these closings are summarized in Table 2.10. As can be seen, 1057 bedspaces were closed in the last year as a result of these orders. A March 24, 1977 order (amended on April 4, 1977--See Table 2.8 note b) further states:

> Failure to comply strictly with the closing to inmate habitation of camps 8, 6, 5 and 9 as herein mandate will constitute civil contempt, in which event the defendants, jointly and severally, shall be subject to a fine payable to the United States in the amount of $10,000 per day for each day's failure to comply herewith.[20]

All eight camps were in fact closed within the prescribed time limits.

Aside from the camp closings ordered, the August 7, 1975 order referenced plans submitted by the defendants in compliance with a February 3, 1975 order, for the construction and staffing of a new medical facility. As of 20 September 1977, funds had been appropriated or a contract made for this construction. Use of the facility is anticipated by February 1979.[21]

State Response to Court Orders

The Mississippi Legislature created in 1976 the State's first Department of Corrections with the passage of House Bill 1479. In November 1976 the first commissioner, a corrections professional from out of State, was appointed. The bill also created major changes in the organization of probation and parole, by abolishing the Probation and Parole Board. The Board had been responsible for administration of parole, probation, and work release programs, supervision of the participants, and granting and revocation of parole. It was replaced by a Parole Board whose activities are now restricted to making parole decisions. All field staff have been reassigned to the Department of Corrections which currently handles administrative and supervisory functions.

It was clear that the first priority task of the new Department would be to take the initiative in reducing prison population, from about 2500 at the time to the 1802 ceiling which resulted from court-ordered closings (absent of the creation of additional bedspaces).*

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* Throughout the District Court orders, reference is made to a minimum space standard of 50 square feet per inmate.

Parole

According to Department of Corrections statistics, the Parole Board granted parole to 71.5 percent of more than 700 inmates interviewed in 1976. There are currently about 40 parole officers supervising over 4700 persons, and with caseloads exceeding an average of 100 per officer, higher risk offenders are not granted parole. If the rate of parole were increased by 10 percent (after a corresponding increase in staff), 70 additional inmate spaces would be available annually.

Work Release

In general, prisoners who have served at least one-third of their sentence (or at least 10 years of a 30-plus sentence) are eligible for parole. Exceptions include habitual offenders, sex offenders (unless recommended for parole by a Department of Corrections psychiatrist), and those having served less than one year of their sentence. Now inmates who have served three-fourths or more of their minimum sentences before becoming eligible for parole may be considered for the work release program. Participants in this program are released to their employers during the day but return to Parchman in the evening until they are granted parole.

Since 1973, 534 inmates have been released through one of the Department of Corrections' four work release centers. Excluding those released through special legislation, this figure represents only seven percent of the departures during this period, a reflection of the difficulty of securing employment for eligible inmates. While figures are not available, interview findings indicate that efforts toward rectifying this situation are underway.

Early Parole

Efforts to comply with the orders brought about passage of two pieces of legislation that significantly redefined Parole Board policy and authority. The first, called "early parole," automatically cut one year off the sentence of certain offenders, primarily those convicted of property crimes. Since its inception in July 1976, early parole has provided for the premature release of approximately 250 prisoners. By the end of 1976, when it became clear that early parole would not be sufficient to reduce the prison population to 1802, the Department of Corrections went back to the legislature for further relief. House Bill 792 was passed in the spring of this year, and since April 1977, approximately 50 prisoners have been paroled through "supervised earned release."

Under this program all those who have served one year of their sentence (with few exceptions) are eligible for parole. In addition to early parole and supervised earned release, it was indicated in interviews with officials that parole policy of the Board has generally become more lenient. Borderline cases are now uniformly decided in favor of the prisoner.

Restitution Program

A Law Enforcement Assistance Administration discretionary grant made possible the July 1, 1977 opening of a residential restitution center in Jackson County, one of Mississippi's most populated and industrialized areas. Although the program is not yet fully operational, plans for its future use include an innovative system of group decision-making: residents will work in regular jobs, pool their earnings, and decide as a group on appropriate monetary restitution for each offender's victim.

Adjudication Measures

It was the belief of many criminal justice officials interviewed that Judge Keady's court orders have pressured trial judges and prosecutors throughout the State to rely more heavily on diversionary mechanisms than in the past. In fact, it has been reported that trial judges have met on more than one occasion since 1971 to discuss how they might reduce the prison population through their sentencing practices. The first such meeting was called by Governor Waller soon after the first court order was issued. One consequence of these meetings has been a greater tendency among judges to impose suspended or reduced sentences, restitution, probation, earned probation,* and/or fines.

Prosecutors have reportedly also been responsive to the Keady orders. For example, one member of the Criminal Division of the Attorney General's Office indicated that the intensification of plea bargaining has reduced both the number of people sentenced to prison and the length of sentences when imposed.

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* A judge may at initial sentencing place a felon at Parchman for a short period of time for evaluation and then release him to probation. The philosophy is that a brief period at Parchman will provide enough shock to convince the individual that he needs to lead a law abiding life.

Current Capacity and Future Plans

Despite the Department of Correction's demonstrated ability to obtain the cooperation of the criminal justice system and the legislature to keep Parchman's population below the court-ordered level, plans have been formulated and appropriations made for additional bedspace.[24] In order to compensate for bedspace lost due to court-ordered closings, two new camps, one for first offenders, were opened in July 1976, having a combined space for 324 men. These roughly replaced the first two camps which were closed on July 1, 1976 (a net gain of 22 beds was realized). A medium security facility to house 192 men was opened in October 1976, partially offsetting the loss of space for 754 inmates due to the closing of the remaining 7 camps prior to July 1, 1977. Twenty-eight more beds were added since July 1977 by renovating and expanding on existing women's prerelease center and by adding space for 13 more beds at another camp. Finally since July, an older facility has been renovated and converted into a reception center with 105 beds. Thus, as of September 20, 1977, Parchman's capacity--using the 50 square feet per inmate criterion--was 1830, scattered over 21 separate housing units.

Under construction are two camps with a combined capacity of 384 beds, with occupancy anticipated by early 1978. However, the Department expects to close three more camps with a combined capacity of 369 by fall 1978. As noted previously, a new medical facility, which will accommodate up to 56 patients, is expected to become operational early in 1979. The Department of Corrections has projected that by next year the rated capacity will level off at 2027 while the population will increase to 3511 by November 1978. If the entire $20,800,000 requested this year is appropriated, the discrepancy between projected population and available housing will drop to 486 beds. In an effort to close the gap, the Mississippi Criminal Justice Planning Division has plans to expand the restitution program through 1980 by funding the construction of three centers with a total capacity of 400. In its 1977 Comprehensive Plan, the Division concluded that "remedial measures composed of both construction and expanded use of alternatives to incarceration and accelerated release programs provide a reasonable expectation of meeting court ordered deadlines."[25] Longer-range plans (three years) for which appropriations have not been made call for a 384-bed minimum security facility, a 144-bed medium-security facility, and a 68-bed "close" custody (maximum) unit.

In sum, the recent efforts in Mississippi described above to address the problem of compliance with Federal court orders in a short time frame represent a rare example of direct collaboration between a Federal court and a Corrections Department in sharp contrast to most other States where Federal courts have intervened.

Inmate Population and Factors Affecting Population at Parchman

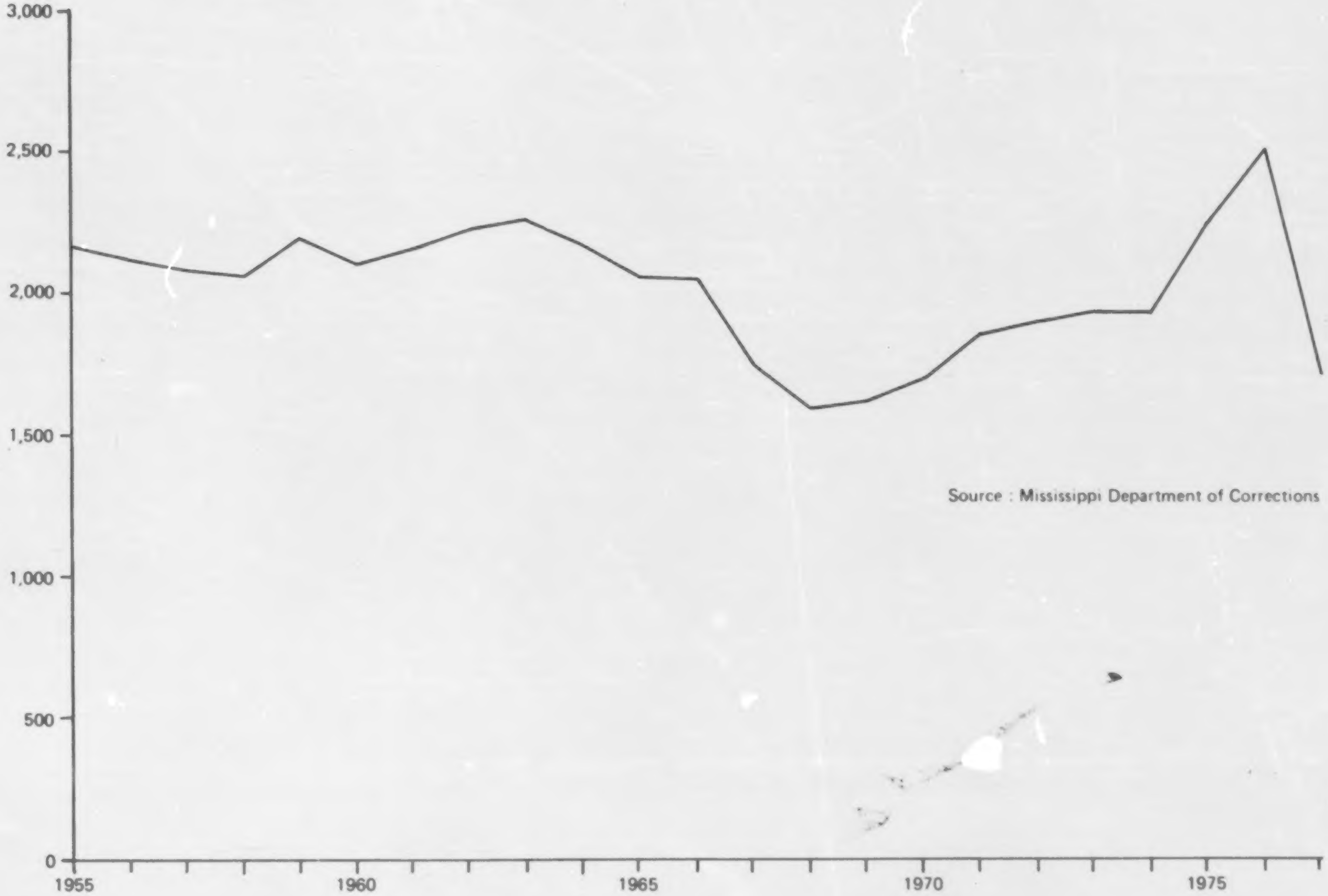
The effect of Judge Keady's orders and the response of the State corrections system is apparent from Figure 2.4. After a sharp rise in 1974 which peaked over 2500, the population declined to below the 1802 level by 1977. Since fiscal year 1955, year-end population counts at Parchman have ranged from some 1600 to almost 2600. Only during the years 1966-69 did the June 30 count fall below the 1802 value.

Under the dynamic and changing circumstances surrounding Parchman due to on-going Federal court intervention, attempts to systematically develop population projections for that facility will almost certainly be thwarted. A key factor affecting population relates to prosecution policies which are presently highly divergent. One explanation for the disparate prosecution policies on diversion, plea bargaining, and discovery may be the overlapping and relatively undefined jurisdiction of district attorneys and county attorneys whose practices have been found to vary.[22] In 1977, the Mississippi Legislature created a Statewide Judicial Council to assess the methods of judicial administration among the various court districts and make recommendations in the direction of greater uniformity. In the meantime, the State Supreme Court has recently introduced several procedural and administrative mechanisms to minimize the delay in processing cases: Whether the net effect on Parchman's population of such reforms, and others, is positive or negative is left an open question at this time.

According to the Mississippi Criminal Justice Planning Division, probation offers the single greatest opportunity to bring the population down. To quote from the Division's 1977 Comprehensive Plan: "Since probation occurs in lieu of institutionalization it completely frees one bed for each probate. It offers cumulative benefits since the average time served exceeds two years. For example, if probations were increased by 100 per year the net reduction in commitments after two years would be 200. With a proper system of pre-sentence investigations including the law enforcement, officers, judges and prosecutors coupled with proper supervisory staff the net impact after two years would be 600 inmate spaces."[23]

Figure 2.4

Mississippi State Prison Population on June 30th (1955-1977)



Source : Mississippi Department of Corrections

Iowa

Recent Population Trend

Following an abrupt drop over a 21-month period beginning in January 1971, Iowa's prison population has risen steadily from the just over 1300 inmates counted on September 30, 1972 to about 1950 counted year end 1976 or by some 50 percent. Figure 2.5 depicts this trend of ending quarterly populations.

Several factors may account for this recent upturn in prison populations. There was a steep rise in felony charges filed and felony case dispositions between 1972-1976[26] from almost 8000 to over 16,800 or 110 percent. Despite increased use of probation, residential alternatives to imprisonment, and a drop in the percentage of dispositions that resulted in imprisonment, the total number of persons sentenced by the courts to a State prison continued to increase. There have also been significant changes in Parole Board policy during this period.[27] Between 1971 and 1972, parole releases increased by 210--from 421 to 631. In that same year, the inmate count was reduced by some 240. During interviews conducted with criminal justice officials in the State, this reflected the desire of the Division of Corrections to lower the population and the Parole Board's effort to comply. In the following year, 1973, when the Board reverted back to pre-1972 practices, the number of parole released decreased to 351, and the inmate count increased to 1350. The sizeable reduction of 280 in paroles granted in 1973 would have created a higher year-end population were it not for a substantial decrease in the number of parole violators and other returned prisoners. Between 1974 and 1976, the continued rise in the prison population was not the result of further parole releases: in both years, this value stayed above 400.

When viewed from the perspective of the trend in year-end population since 1900, the magnitude of the population and its rate of increase since 1971 do not seem as dramatic. After growing to a peak of over 3000 in 1932, year-end population declined over the next decade by some 700 inmates. An even more abrupt drop during the war years of 1942-45 decreased the inmate population by still another 700 persons. Then the population climbed back up, increasing by about 500 persons by the end of Fiscal Year 1950. The decade of the 1950s was the most stable in this century. A small rise that peaked in 1962 at 2506 persons was followed by a 10-year drop to the lowest year-end count since 1921, even lower (by more than 200) than that at the end of World War II. This longer trend is depicted in Figure 2.6 in which the range of the previous graph is boxed.

Figure 2.5

Iowa Adult Correctional Institutions
Ending Populations: FY 1899-FY 1976

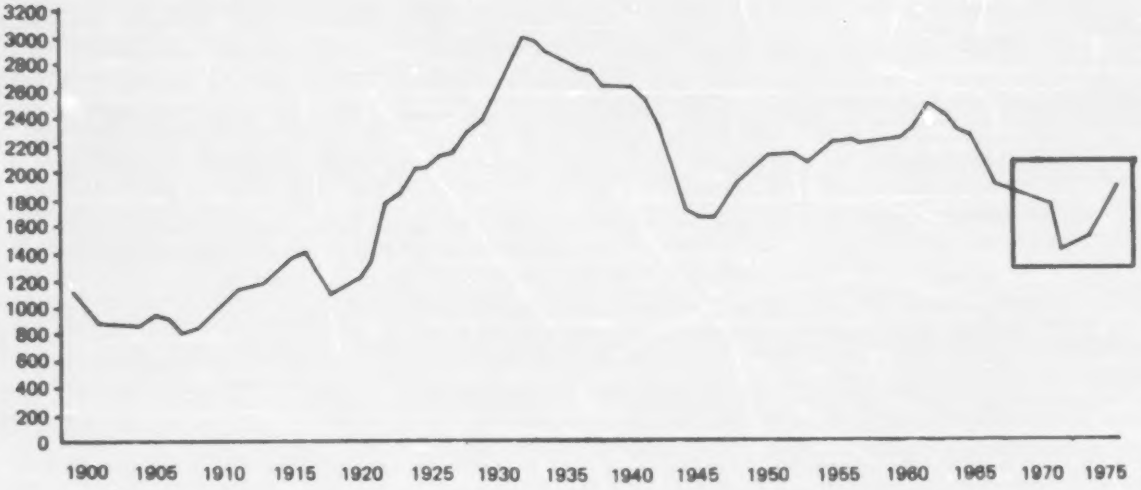
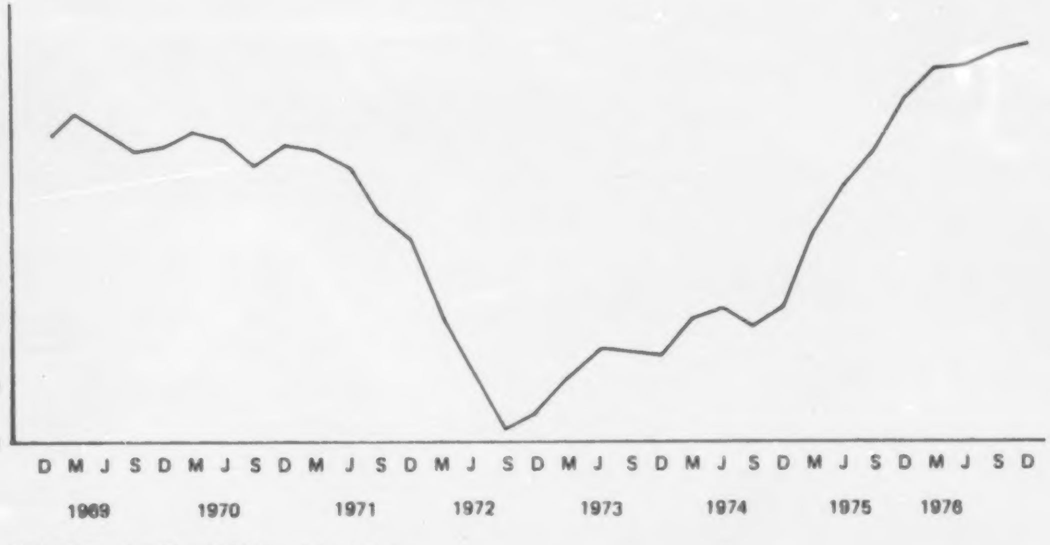


Figure 2.6

Iowa Adult Correctional Institutions
Ending Quarterly Populations: January 1969-December 1976



* Figures reproduced from Adult Corrections in Iowa.

The analysis above should caution the reader with regard to visual inspection of trend lines of relatively short duration. From the larger visual perspective, it might appear that the year-end population in 1976 is nearing a peak, the third such peak of a cyclical downward trend beginning in the 1920s.

Capacity: Present and Future

The Division of Adult Corrections is one of five divisions comprising a large umbrella agency in the Iowa State government, the Department of Social Services. Two divisions of the Department, the Division of Administrative Services and the Division of Management and Planning, provide administrative support for the agency. Located in the latter division is the Bureau of Correctional Evaluation, which has played a role in the planning of Iowa's correctional system and which will be discussed below. Thus, many administrative functions for a correctional system that in other States may be concentrated in a single Department of Corrections are located throughout Iowa's Department of Social Services.

The Division of Adult Corrections currently has six adult correctional facilities with a rated capacity for 2245 men and 86 women. In May 1977, these facilities housed 1975 men and 81 women. (See Table 2.11.) All residents of adult correctional facilities are housed in single cells. The only shared inmate sleeping space in Iowa is in minimum-security buildings outside prison walls.

The two major prisons, both constructed before 1900 and designed for maximum security, were built with single cells. By remodeling a former mental health facility at Mt. Pleasant as a temporary correctional institution, the Division has provided additional capacity.

The physical conditions at Iowa's adult prison facilities vary among institutions.* Sleeping space at the major institutions ranges from 40 to 50.5 square feet per cell. The only exceptions are 25 cells of 94 square feet each, reserved for "honor lifers" at Fort Madison. At this institution, which houses the older and more agreeable offenders, the number of men who have requested

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* As part of a report completed in March 1977 by the Iowa Advisory Commission on Corrections Relief, a facilities study of the Fort Madison, Anamosa, and women's institutions was performed by a private firm specializing in prison architecture. The study rated physical conditions at the three prisons from poor to good.

Table 2.11

Iowa State
Correctional Institutions

Prison	1977 Age	Security Level	Rated Capacity	Population as of 5/77
Men's Penitentiary-Fort Madison	138	Max.	1076	887
Men's Reformatory-Anamosa (includes minimum-security Luster Heights Work Camp)	105	Max./ Med.	742	713
Medical Security Facility-Oakdale	9	Max./ Med.	97	92
Women's Reformatory-Rockwell City	62	Med.	86	81
Temporary Men's Facility-Mt. Pleasant	2	Med.	144	127
Newton Complex-Riverview Release Center	12	Min.	186	156
TOTAL			2331	2056

voluntary segregation for their own protection is at a peak in the prison's history, despite the single-cell structure. At Anamosa, a medium-security facility for first offenders between the ages of 18 and 30, most of Iowa's prison industries are housed.

Prisoner population fluctuation since the middle 1960s has been reflected by changes in Iowa's prison capacity. The net decrease in average daily population of 996 between Fiscal Years 1965 and 1975 was accompanied by a decrease of 733 in capacity for males. According to officials of the Division of Adult Correction, the drop in population enabled the Division to improve living conditions during this period. At Fort Madison, prison capacity for 498 was sacrificed in favor of interior renovations and closing physically dilapidated minimum-security units and farms outside the walls. A cellblock was condemned at Anamosa Men's Reformatory resulting in the loss of another 398 beds. On the other hand, during these years a work release center expanded its capacity to 120, and a new psychiatric facility added space for 96 prisoners.

Although the Iowa correctional system has felt population pressure only in the last five years, an ad hoc committee on corrections has existed in every Iowa legislative assembly since 1964. This is in strong contrast with numerous other States which have delayed corrections planning until a crowding crisis provokes emergency action.

When the prison population began to rise once again in 1973, the Division of Corrections acquired 274 bedspaces by reopening the same prison farms and leasing a mental health facility. Two factors in this expansion are notable. With the acquisition of 274 beds for men since 1975, the current system capacity for men exceeds the 1976 male population by 275. Thus the Division of Corrections has successfully remained ahead of the growth and has managed to avoid emergency housing.

Plans

Revised Criminal Code

The 1976 Session of the 66th General Assembly enacted a major revision of the criminal code, effective January 1978. This was described as an attempt to reestablish the viability and efficiency of the sentencing process and to correct sentencing inconsistencies and anomalies produced by the old code, whose provisions contained little unifying purpose.

The sentencing structure of the revised code is based on four grades of felonies: Class A felonies carry a mandatory life sentence; Class B felonies provide for maximum sentencies of 25 years; Class C, 10 years; and Class D, five years. The revised code includes:

- Mandatory minimum sentences for forcible felonies committed with the use of a firearm.
- Mandatory minimum sentences for an individual convicted of a Class B, C, or D felony with a prior conviction for forcible felony or a crime of similar gravity.
- A new sentencing provision allowing the court to review and change its sentence after 80 days.
- The elimination of judicial discretion in the case of offenders subject to mandatory minimum terms of probation.

Population and Facility Studies

In its budget proposal to the 1976 legislature, the Department of Social Services requested funds to build a new, medium-security facility. To support its request, the Department cited a report prepared by one of its branches, the Bureau of Correctional Evaluation. Entitled Iowa's Rising Prison Population and referred to as the "gold book," the study predicted that Iowa's prison population would reach 3200 by the 1980s.

Instead of granting the Department of Social Services' request for building funds, the General Assembly enacted legislation in 1976 to expand community corrections.[29] In addition, it provided authorization and appropriations for converting a former hospital and renovating a former minimum-security dormitory, providing 150 additional beds. In the same Act, the legislature sponsored the formation of the Advisory Commission on Corrections Relief. In May 1977, the Commission submitted its report to the legislature. In the report, Adult Corrections in Iowa (referred to as the "blue book"), the Commission estimated future prison populations, considering the impact of expected alternatives to imprisonment and the new code.

Table 2.12 shows the Commission's three sets of projections of Iowa's future prison population. The "High" column estimate is about 200 below Iowa's May 1977 prison count of 2056, which is consistent with the Commission's conclusion that "15-20 percent of the current institutional population could be released to community programs." The Commission also recommended the creation

Table 2.12

Iowa Adult Correctional Institutions
Projected Inmate Population,
End of Fiscal Years 1977-1988*

Fiscal Year	Projections		
	High	Low	Probable
1976	1912	1912	1912
1977	1866	1761	1814
1978	1817	1644	1752
1979	1829	1626	1763
1980	1865	1612	1780
1981	1891	1626	1811
1982	1939	1605	1802
1983	1928	1584	1786
1984	1904	1555	1758
1985	1868	1513	1716
1986	1824	1467	1670
1987	1777	1420	1630
1988	1732	1390	1590

*Advisory Commission on Corrections Relief, Adult Corrections in Iowa (March 1977).

of an independent Department of Corrections, with integrated administration for institutional and noninstitutional corrections programs.

If the "gold book" (*Iowa's Rising Prison Population*) reflects the Department of Social Services' position and the "blue book" represents the legislature's opinions, resolution may come from another source. At the Governor's request, a blue ribbon task force, under the aegis of the Iowa Crime Commission, was organized to develop a Masterplan for Corrections. Although the work is in the early stages, it seems likely that the task force's recommendations will be based on projections that fall between the "gold book" estimates of continued population increase and the "blue book" estimates of decrease.

The revised criminal code is a significant milestone in Iowa criminal justice. As elsewhere, support of sentencing reforms has been aided by a concordance between the departure from disparate justice and the emphasis on law and order. Given the commitment in Iowa to community corrections and the careful course shown by the legislature, it seems likely that the impact of the new code on prison populations through 1982 will be muted.

Other Factors Affecting Population

The most distinctive feature of corrections in Iowa, and an important factor in the size of its prison population, is the availability of alternatives to both jail and prison. The *Community Corrections Act*, Senate Bill 482, was passed in 1973 and provided communities with funds to establish local correctional programs and services. The Act mandated the formation of the Bureau of Community Corrections to provide technical assistance in local development and expansion of pretrial programs, presentence investigations, probation services, and residential treatment facilities in each of Iowa's eight judicial districts.

The Bureau funded community programs, establishing them in judicial districts that did not provide their own. The Bureau currently administers all post-institutional community programs in some of the districts. In 1977, however, the passage of Senate Bill 112 transferred the responsibility for administration and operation of preinstitutional community corrections from the Bureau to individual judicial districts.

Since 1971 there has been an increasing use of probation and community residential placements as alternatives to prison. Some 69 percent of all convicted felons received sentences other than prison or jail. After climbing steadily, this fraction reached 88 percent.[30] The proportion of sentenced offenders *not* incarcerated varied across judicial districts between 86 and 72 percent in 1976. All eight judicial districts are scheduled to open community residential facilities in 1977, each located in a large city. All are designed to house between 20 and 30 men; one also has room for 10 women.

Discussion, Common Problems and Differences

The four case studies illuminate several common themes and important differences. In particular, attention should be paid to the following:

- The accommodation of prison populations, which can shift dramatically from one counting period to the next, requires plans, which almost always lag behind population changes before they can be implemented, regardless of their nature. The Mississippi case study dramatically demonstrates the need of prison and correctional administrators to ensure constitutionally-guaranteed sleeping space for every prisoner under their custody on a day-to-day basis. The need of planners to project prison population with reasonable accuracy in order to develop sound and effective plans almost pales in comparison; yet such planning is an essential function of government.

- Sharp upward fluctuations in prison population took place in three of the four States around 1973. In Mississippi, a Federal court imposed a ceiling on the prison population, and the 1977 population approximates the 1960 population (although nearly 500 State prisoners were backed up in local jails in June 1977). The prison population increase occurring in Illinois and Iowa between 1973 and 1977 brought prison populations back to the 1962 level. Only in South Carolina was a new high reached, and it was this State which resorted to emergency measures to deal with the resulting overcrowded conditions.

- A significant portion of the South Carolina increase and projected increase in population was a result of jurisdictional change and did not represent an actual growth of State and local prisoners confined. The importance of fully considering these jurisdictional modifications is emphasized in several places in this report. These modifications can, of course, work both ways. In Illinois, for example, in 1973, jurisdiction over misdemeanants was transferred from the State Department of Corrections to local facilities.

- The rapid 1973-77 population increase was influenced by a different set of circumstances in each State. Similar "elbows" that appear in the population trends were apparently driven by sets of policies that contained many differences. For example, increased court activity was common among the States, but reduction in the number of paroles was a factor only in Iowa. This data supports the hypothesis that the recent increase in prison population is more a function of increased admissions than of sentence length.

- It is difficult to articulate a set of objectives for a corrections system which can be addressed by researchers toward proposing the most effective decisions and actions for meeting those objectives with limited resources. Given a 20 million dollar supplement to an expected budget of 50 million dollars, the administrator of a State corrections agency would find it difficult to make a "rational" spending decision in the face of an array of correctional objectives such as reduction of crime, ensuring public safety, punishment, rehabilitation of offenders and their reintegration into the community, supervision in the community, and others.

- The two States with the most severe crowding problem, Illinois and South Carolina, give little indication of coordination among criminal justice agencies and other critical decision-makers. In Iowa, a central theme of long range advance planning (since 1964) with a focus on community-based alternatives to prison predominated. In Mississippi, working relationship collaboration between a Federal judge and a newly-created Department of Corrections has led to the implementation of a series of reforms and the temporary abatement of prison population growth.

- It is important to note that a prison system might face a crowding crisis either because it is too fat or too lean. The utilization of probation services partly accounts for this difference. In South Carolina 16 percent of convicted felons were placed on probation in 1974 compared with 61 percent in Illinois in 1975.

- Case studies again point to the largely hidden reservoir represented by local facilities. The interconnection of prisons and jails is commented upon throughout this report, but it is generally believed that jails are considerably more deficient than prisons in the provision of decent living conditions. For this preliminary report, however, the full dimensions of that problem remain unknown.

- Uncertainties associated with projections of correctional populations were highlighted in all of the two widely differing population projections made in Iowa, and assumptions underlying projections made in the other States reiterate our assertion that the nature of assumptions made for the criminal justice system affect the result to a greater extent than does the projection technique.

As these case studies indicate, caution should accompany nationwide generalizations concerning the prison-crowding problem. These differences among States suggest that there is no single national prison population policy strategy. It is clear, however, that many aspects of criminal justice policy-making are likely to impact on prison populations.

II. NOTES

1. Attorney General for the State of South Carolina, Annual Report. Summary of Criminal Prosecutions for the Calendar Year 1974.

2. Data from the Attorney General's Office.

3. South Carolina Department of Corrections, Division of Planning and Research, Quarterly Statistical Report: Third Quarter Fiscal Year 1977 (Columbia: May 1977).

4. South Carolina Department of Corrections, Comprehensive Growth and Capital Improvements Plan, 1976.

5. Information provided by official of State Department of Corrections.

6. South Carolina Department of Corrections, Comprehensive Growth and Capital Improvements Plan, 1976.

7. Gleaned from site interview with criminal justice officials.

8. All parole statistics cited were taken from monthly reports of the Illinois Parole and Pardon Board.

9. John Flanagan, "Tentative Population Projections Fiscal Year 77," Report to the Illinois Department of Corrections, Adult Division (September 1975).

10. Crime index and arrest statistics were taken from Criminal Justice Information Services, State Department of Law Enforcement, Illinois Uniform Crime Reports (1972-76).

11. These subsequent adjudication statistics were taken from Administrative Office of the Courts, Annual Report to the Supreme Court of Illinois (1961-1975).

12. National Council on Crime and Delinquency, Criminal Justice Newsletter, 8 (August 1, 1977).

13. Memorandum dated July 15, 1977 from Richard B. Gramby, Coordinator of Program Services, Adult Division, to Phillip Shayne, Chief of Program Services.

14. Telephone communication with a representative of the Chicago Crime Commission.

15. Administrative Office of the Courts, Annual Report to the Supreme Court of Illinois, 1974.

16. See David M. Lipman, "Mississippi's Prison Experience," Mississippi Law Review, 45(1974), 685-785.

17. See Anderson v. Nosser, 438 F. 2d 187 (5th Circuit, 1971).

18. Gates v. Collier, 349 F. Supp. 881 (N.D. Miss. 1972).

19. Summarized from Gates v. Collier, 349 F. Supp. 881 (N.D. Miss. 1972).

20. Order of the U.S. District Court for the Northern District of Mississippi, March 24, 1977, as amended on April 4, 1977, p. 4.

21. Telephone interview with Acting Warden Presley.

22. This is suggested in Mississippi Criminal Justice Planning Division, 1977 Comprehensive Plan.

23. Ibid.

24. The data that follow were obtained and verified in telephone interveiws with Department spokesmen.

25. Ibid.

26. Judicial Workload statistics are from Court Administrator, Iowa Judicial Department, Annual Report, 1972-1976.

27. Parole statistics are from: Iowa Board of Paroles, Biennial Reports, 1968-1976.

28. Advisory Commission on Corrections Relief, Report to the 67th General Assembly of Iowa, Adult Corrections in Iowa (March 1977).

29. For an early assessment of the legislation, see "Proposed Criminal Law Reform in Iowa: A Symposium--Student Commentary on Proposed Criminal Law Reform in Iowa--Judgement and Sentencing Procedures," 60 Iowa Law Review, 598.

30. Advisory Commission on Corrections Relief, op. cit.

III. CAPACITY OF CORRECTIONAL INSTITUTIONS

This section describes both present conditions in State and Federal correctional institutions in the United States and plans for these corrections systems through 1982. The data described and analyzed were obtained from surveying corrections agencies of the 50 States, the District of Columbia, and the Federal Bureau of Prisons. The instruments used to collect the data and a detailed description of the survey method appear in the Technical Appendix.

Two data collection instruments* were used in our survey of State correctional institutions and Federal institutions. The first (PC-1) sought data at the State level, including among other items used for the population projects, capacity on December 31 for the years 1970 through 1976 and on June 30, 1977. The second form (PC-2) used the institution as the unit of response, and included among other items, population and capacity on December 31 for the years 1970 through 1976 and inmate counts by inmate security level, for those serving more than a year, on June 30, 1977.** Each institution was characterized by security level, age, size, and region.***

The survey was conducted primarily by mail, with planned extensive telephone and site follow-up where necessary. In some instances, the desired data item was simply not available and estimates were made from appropriate secondary sources. All 52 PC-1 forms and 569* PC-2 forms were obtained for the 50 States, the District of Columbia, and the Federal prison system, covering all correctional facilities under State authority.

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* These forms and the survey methodology are located in Volume II: Technical Appendix

** The number of prisoners with a year or less maximum sentence on December 31, 1976 was used as an estimate of the number of such prisoners on June 30, 1977.

*** Sex of inmates, security level, and age of institution were obtained from secondary sources. (For the regional breakdown of States used see Table 3.1.)

The following sections provide statistical and descriptive data concerning State and Federal correctional institutions. Plans through 1982 for building, renovating, and conversion of institutions, and the costs associated with the implementation of such plans--as reported by survey respondents--are described at the conclusion of the chapter.

Distributions of Prisoner Population: An Overview

Preliminary National Prisoner Statistics (NPS) data, as displayed in Table 3.1, report that the total number of inmates held on December 31, 1976 in both Federal and State institutions was 284,177. Included were 15,635 prisoners (six percent) with a year or less and 5858 State inmates held in local jails.** Women accounted for eight percent of prisoners sentenced for less than one year and four percent of those sentenced for longer periods.

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* Since the instructions for completing the forms suggested that prerelease facilities with fewer than 100 prisoners be aggregated into two groups--State-owned and contracted prerelease facilities--this figure does not reflect the total number of institutions included in the survey. Several of the returned PC-2's contained data from facilities that had been aggregated in this way, without indicating the number of facilities so combined.

** These inmates are held in local jails because of overcrowding in State institutions and are not considered by these jurisdictions to be in the custody of the State correctional system. In addition, the number of prisoners in Maryland (1081), South Carolina (786), Massachusetts (140), and Arkansas (13) includes inmates held in local jails that are considered by these jurisdictions to be in the custody of the State correctional system. Three percent of State-sentenced prisoners on the last day of 1976 were being held in local jails because of overcrowding. An estimated 2000, usually short-term prisoners, are held in local jails under contract to the Federal government. Also, included in the Federal count is an estimated 1500 inmates in contract prerelease facilities.

Table 3.1

Total Number of Persons Held by Federal and State Authorities on December 31, 1976 by Region, State, and Sex

	Both Sexes				Male			Female		
Region and State	Total	Over One Year Sentence	Other	Inmates Held in Local Jails	Total	Over One Year Sentence	Other	Total	Over One Year Sentence	Other
United States, Total	284,177	262,684	15,635	7,858	267,245	252,838	14,407	11,074	9,846	1,228
Federal Institutions, Total[2]	30,299	28,155	2,144	2,000	28,929	26,895	2,034	1,370	1,260	110
State Institutions, Total	253,878	234,529	13,491	5,858	238,316	225,943	12,373	9,704	8,586	1,118
Northeast										
Maine	615	610	5	0	605	600	5	10	10	0
New Hampshire[3]	254	248	6	0	254	248	6	0	0	0
Vermont	460	307	153	-[4]	450	301	149	10	6	4
Massachusetts	2,695	2,651	44	0	2,583	2,573	10	112	78	34
Rhode Island	652	490	162	-[4]	639	481	158	13	9	4
Connecticut	3,239	1,923	1,316	-[4]	3,114	1,874	1,240	125	49	76
New York	17,707	17,700	7	0	17,235	17,228	7	472	472	0
New Jersey	6,204	5,685	319	200	5,789	5,470	319	215	215	0
Pennsylvania	7,590	6,656	934	0	7,361	6,457	904	229	199	30
North Central										
Ohio	12,525	12,525	0	0	11,983	11,983	0	542	542	0
Indiana	4,903	4,203	700	0	4,742	4,051	691	161	152	9
Illinois	9,651	9,242	409	0	9,422	9,021	401	229	221	8
Michigan	12,462	12,462	0	0	12,057	12,057	0	405	405	0
Wisconsin	3,299	3,299	0	0	3,160	3,160	0	139	139	0
Minnesota	1,624	1,624	0	0	1,561	1,561	0	63	63	0
Iowa	1,956	1,891	65	0	1,878	1,815	63	78	76	2
Missouri	4,997	4,997	0	0	4,878	4,878	0	119	119	0
North Dakota	198	162	36	0	198	162	36	0	0	0
South Dakota	524	481	43	0	502	461	41	22	20	2
Nebraska	1,474	1,438	36	0	1,371	1,353	18	103	85	18
Kansas	2,086	2,078	8	0	2,013	2,013	0	73	65	8
South										
Delaware	953	684	269	-[4]	910	665	245	43	19	24
Maryland[6]	7,912	7,437	475	-[7]	7,679	7,218	461	233	219	14
District of Columbia	3,086	2,299	787	-[4]	2,915	2,220	695	171	79	92
Virginia	7,480	6,180	510	790	6,421	5,956	465	269	224	45
West Virginia	1,308	1,294	14	0	1,269	1,255	14	39	39	0
North Carolina	13,257	11,570	1,687	0	12,770	11,195	1,575	487	375	112
South Carolina	6,988	6,433	555	-[7]	6,695	6,169	526	293	264	29
Georgia	12,211	11,134	527	550	11,162	10,689	473	499	445	54
Florida[8]	18,093	17,793	0	300	17,008	17,008	0	785	785	0
Kentucky	3,657	3,657	0	0	3,521	3,521	0	136	136	0
Tennessee	4,837	4,817	20	0	4,634	4,623	11	203	194	9
Alabama	5,193	3,032	1	2,160	2,824	2,823	1	209	209	0
Mississippi[9]	2,237	2,135	0	102	2,059	2,059	0	76	76	0
Arkansas	2,503	2,431	72	-[7]	2,389	2,323	66	114	108	6
Louisiana	6,347	4,591	0	1,756	4,403	4,403	0	188	188	0
Oklahoma	4,339	3,649	690	0	4,161	3,503	658	178	146	32
Texas	19,717	19,717	0	0	18,894	18,894	0	823	823	0
West										
Montana	558	551	7	0	558	551	7	0	0	0
Idaho	695	682	13	0	684	671	13	11	11	0
Wyoming	340	340	0	0	340	340	0	0	0	0
Colorado	2,244	2,239	5	0	2,167	2,162	5	77	77	0
New Mexico	1,352	1,220	132	0	1,296	1,167	129	56	53	3
Arizona	2,850	2,850	0	0	2,725	2,725	0	125	125	0
Utah	820	748	72	0	794	723	71	26	25	1
Nevada	953	953	0	0	899	899	0	54	54	0
Washington	3,893	3,881	12	0	3,684	3,672	12	209	209	0
Oregon[10]	2,859	2,859	0	0	2,749	2,749	0	110	110	0
California	21,088	18,113	2,975	0	19,964	17,459	2,505	1,124	654	470
Alaska[11]	494	230	264	-[4]	471	226	245	23	4	19
Hawaii	499	338	161	-[4]	476	328	148	23	10	13

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[1] Includes prisoners with sentences of a year or less, as well as unsentenced persons. The latter include, among others, those held for safekeeping, those undergoing court-ordered evaluation, civil narcotics addicts, and, in states operating an integrated jail prison system, those held awaiting trial or sentencing.

[2] The distribution of the inmate population in the Federal Bureau of Prisons between prisoners with a maximum sentence of over one year and those with shorter or no sentences was estimated. Also estimated were 1500 inmates in contract pre-release facilities and 2000 inmates, usually short-term, housed in local jails under contract to the Bureau of Prisons.

[3] No females housed in New Hampshire's system. Female inmates are transferred to Maine and Connecticut.

[4] Figures include jail and prison inmates, as jails and prisons in these jurisdictions form an integrated system. For the District of Columbia, figures exclude inmates held in the D.C. jail and detention center who had a maximum sentence of a year or less or no sentence.

[5] All figures are estimates within 5 percent of actual.

[6] The distribution of the inmate population in Maryland between prisoners with a maximum sentence of over one year and those with shorter or no sentences was estimated.

[7] The figures for Maryland include 1,081 inmates, for South Carolina, 786 inmates, for Arkansas, 13 inmates held in local jails that are considered by these jurisdictions to be in the custody of the State correctional system.

[8] Less than one percent of all data includes unsentenced persons unable to be distinguished from other inmates.

[9] The distribution of the inmate population in Mississippi between prisoners with a maximum sentence of over one year and those with shorter or no sentences was estimated. There were 483 inmates held in local jails in Mississippi on July 28, 1977.

[10] Includes a small number of felons (estimated to be no more than 30) who were sentenced to terms of one year.

[11] Figures include 57 inmates with over one year maximum sentence sent to the Federal Bureau of Prisons. There were 90 inmates (88 men and 2 women) serving time in the Federal Bureau of Prisons from Alaska on August 19, 1977. All data are estimates.

Source: Preliminary unpublished data made available by the Bureau of Census.

Our own data for June 30, 1977 give a rather similar population size of 283,433.* The totals from our survey may not be as reliable as National Prisoner Statistics figures becuase the attempt to collect population data from each institution, rather than for the state as a whole, increased the probability of error in the collection and compilation of the data. Nevertheless, the data are appropriate for the assessment of the capacity of prison systems (as defined by the individual prison systems) to house prisoners.

According to Table 3.2, almost half of the prisoners confined in State correctional facilities for the last two years have been held in institutions in the South. This is a significantly larger proportion of inmates than the region's one-third share of the U.S. population. The other three regions (excluding the Federal system) all have total inmate populations below their respective shares of the national population.

Table 3.2

Percent Distribution of State Prisoner Population and U.S. Population by Region

	Percent of Prisoner Population			Percent of U.S.
Region	12-31-75	12-31-76	6-30-77	Population (7/1/77)
Northeast	16%	16%	15%	23%
North Central	22	22	23	27
South	47	46	46	32
West	15	15	15	18
	100% (218,619)	100% (253,878)	100% (259,557)	100% (216,817,000)

Source: PC-2 and Census data

* Includes an estimate of 8000 State prisoners held in local jails.

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* This figure does not include an estimated 8000 State prisoners and 2000 Federal prisoners held in local jails. They were not included in the survey becuase there was no straightforward way of determining the capacity of jails to hold State prisoners as distinct from local inmates. The focus of the survey was a preliminary assessment of the capacity of prison systems to house prisoners, not an exact census. It should be added that the figures are believed to be within one or two percent of the actual number of State and Federal prisoners (exclusive of those held in local jails) in the United States on June 30, 1977.

Institutional and Inmate Security Classification

Much of the analysis that follows is organized by security classification because the ability of prisons to house prisoners varies dramatically across both institutional and inmate security classification.

The American Correctional Association definitions will introduce the reader to the characteristics of maximum, medium, and minimum security to prisons.[1]

> The present typical maximum security institution will in some cases be enclosed by a masonry wall from 18 to 25-feet high, but often, a double fence...will provide the needed security. The perimeter in all maximum security facilities will be adequately equipped with armed guards in well protected and strategically located towers.
>
> A large percentage of the housing will be composed of interior cell blocks, and, ideally, each cell will be occupied by one prisoner and will be equipped with plumbing and other sanitary facilities. Most of the prisons built in the United States up to the first World War were, generally, of the maximum security type. There have been few such institutions built in recent years, and it is probable that for many years to come, in most States, it will be unnecessary to build new maximum security institutions. In all States, a much larger proportion of the prison population is housed in maximum security facilities than would be necessary. It is doubtful if real maximum security facilities are needed for more than 15 percent of an unselected prison population.
>
> The medium security institution will normally have a double fenced enclosure, an inner 12 to 14-foot fence, with curb and outer 8 to 12-foot fence, 16 to 20 feet apart and both topped with barbed wire. Buildings should be kept back at least 35 feet from the inner security fence. The fence perimeter should require a minimum number of personnel to guard the fence. The housing of this institution would be largely made up of outside cells. One unit not to exceed 150 cells may be an interior cell block type of building for special cases difficult to handle in housing with outside windows. Other types of housing may include honor rooms, cubicles, squad rooms, and dormitories.

> Dormitory housing is always to be regarded as a compromise between construction costs and the ideal conditions of individual rooms or cells. About one-half of an unselected State prison population can be handled satisfactorily in medium security facilities.
>
> The minimum security institution operates without fixed armed posts. It may or may not have a fenced enclosure. In small installations in remote areas the fenced enclosure may not be necessary, but signs delineating the facility's limits should be posted with the same dual purpose as a fence, albeit not a physical barrier. In larger establishments, and in those located in rather heavily populated areas, the fence will be found desirable.
>
> The housing facilities of the minimum security institution may be composed to a large extent of dormitories. Individual cells or rooms are always preferable to dormitories, but since they are more expensive to design and construct, it has been found desirable and reasonably satisfactory to operate a minimum security facility in which about 70 percent of the housing is of the dormitory type....In passing it should be stated that dormitories are very unsatisfactory as housing in women's institutions. Traditionally, our society has provided a different standard of modesty and privacy for women.
>
> If a prison system maintains an adequate program of classification, it is possible to maintain approximately one-third of the unselected adult prison population in open or minimum security institutions and facilities.

The grade of custody usually refers to the perimeter security of the facility, but prisoners are also classified internally by level of security. One can, therefore, find minimum-security prisoners inside a maximum-or medium-security institution. Several different arrangements are possible within a facility. The American Correctional Association recommends

> Under most operating conditions an institution should provide for three or four different degrees of custody. The basic three are Close, Medium and Minimum. In most cases the fourth, or maximum custody classification, is used only for the known "escape risk" inmates or those considered incorrigible. In practice, Close Custody inmates are housed in the institution's most secure

> housing units, are assigned to work within the institution enclosure, and are under constant supervision. Close custody classification is intended, not only to reduce the escape hazards, but to provide close supervision for sex deviates, abnormal, or unusually difficult types of prisoners. Medium Custody classification should normally provide that inmates be available for work on the inside without constant or direct supervision, and on the outside of the regular enclosure under supervision. This group is considered eligible for outside assignments such as farms, camps, logging operations, etc.; and usually under general or intermittent supervision.

For purposes of this report, we have narrowed the four degrees of inmate custody recommended by the American Correctional Association to three (combining "close" and "maximum" into one called maximum) using the same inmate and institutional terms for custody designations. These security classifications for both institutions and inmates are paradigms only; particular classifications may not, and most likely do not, conform to these standards. There is wide variation among States and institutions within a State in the meaning of institutional and inmate custody levels.

To illustrate the structural chacteristics of institutional custody designations and to inform the subsequent statistical overview in this chapter, brief descriptions of five institutions are presented below. Developed through site visits to the case study States, these four profiles capture the diversity of correctional facilities among States, within States, and within large complexes of a single correctional center.

Stateville Correctional Center, Illinois (Maximum Security)

Stateville Correctional Center (SCC), opened in 1925, is in Joliet, Illinois, less than an hour's drive south of Chicago. The most immediate impression a visitor receives is the size of the complex. The prison comprises four enormous round cellhouses (C, D, E, and F) and a long rectangular cell house (Cellhouse B). Fanning out from a gigantic circular central dining facility (from its northern hemisphere) and proceeding form east to west, occupying each 36 degree segment is a round cellhouse, until one comes to the last segment on the west, in which sits Cellhouse B. Each of the four round cellhouses has a ground floor and three balconies.* Each floor has 62 cells. Cellhouse F has a

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* Balconies, floors, tiers, and galleries are frequently used interchangeably. "Flag" or "flats" usually designate the ground floor.

slight variation. It contains 31 double rather than 62 single cells on its second balcony and 15 dorms and one double cell on its third balcony. All the cells are exterior cells. Rising out of the center of each roundhouse is a guard tower from which a single guard, in principle, could see the entire confined population. In practice, however, every time a guard turns to watch his wards, his back is turned on another segment of the prisoners. If the round cellhouses are a bit complex, Cellhouse B suffers from unrelieved linear simplicity. There are four balconies each with 400 interior cell units (each floor with 80 cells arranged in two back-to-back galleries of 40 each). These six immense structures (dining facility and the five cellhouses) occupy only roughly 25 percent of the land area within the Stateville Correctional Center's gun-towered high walls. Walkways connect the cellhouses with about 15 other major structures (powerhouse shops, school, laundry, chapel, etc.). These structures roughly occupy another 25 percent of the 60-acre rectangular area inside the walls, leaving half on the inside area (especially from the Administration Building to the area surrounding the cellhouses) in a manicured lawn and well-kept gardens. Built for 1392 inmates, it once housed 3952 (in 1935) and now houses 2500 inside the walls and 200 on a prison farm a mile away.

Dwight Correctional Center, Illinois (Women's, Medium Security)

The Dwight Correctional Center lies in northeastern Illinois 35 miles west of Kankakee. It was opened in 1932, and became the State Reformatory for Women. Dwight accepts both misdemeanants and felons so that inmates' sentences can run from 90 days or less to life.

A cyclone fence circles the 30-plus acre site. Detached cottages, recreational and vocational buildings form clusters. The physical facility has the feel of a campus sprawl. It is, therefore, rather surprising to see columns of women "marching" between units. The fence line, which runs over a half-mile, has a clinical building at one end and the administration building a few hundred feet short of the other end.

Vienna Correctional Center, Illinois (Minimum Security)

Vienna Correctional Center, the State's newest institution, is located at the southern tip of Illinois, nearly 400 miles from Chicago.* Vienna is a fully minimum-security institution and has no fence. Opened in 1971, the new facility appears at first sight to be a suburban community. Cellblocks are neighborhoods, cells are rooms, the big yard is a town square, and there are workshops and shopping areas, a barber, gymnasium, music facility, a spacious school and library--each a separate detached facility. The living rooms all have locks, but the inmates (called residents) carry their own keys. The academic program, which includes some 30 courses (day and night), has, in addition to prisoners, some 300 townspeople who come on campus as fellow students with the residents. A nearby college furnishes the faculty.

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* Some 57 percent of Vienna's inmates come from Cook County.

There are no cellblocks to break out of, no walls to climb or towers to shoot from. If a prisoner leaves, the countryside is not alarmed, and escapees are called "walkaways." In the first 10 years, fewer than 30 of over 4000 residents have left illegally. Vienna has been riot-free since its opening. The prisoners operate a multi-county radio-dispatched emergency ambulance service. It has already saved lives of area residents injured in accidents in remote locations of the vast rural expanse it serves. In contrast to Stateville, 350 miles to the north, Vienna has no difficulty in recruiting and retaining staff. It has a prospective employee waiting list of 1500.

Mississippi State Penitentiary (Mixed Custody Complex)

Parchman, operating as a farm system until recently, is Mississippi's only State prison facility.* Over the years since 1906 it has grown from 2000 acres to over 21,000 acres. The core of the prison is located at Parchman in Mississippi's delta country 130 miles northwest of the State capital of Jackson. Because Parchman has been basically a farm operation, its structures until recently differed from a walled prison. Typical buildings include barns, equipment sheds, repair shops, storehouses, cotton gins and fenced dormitories. Many of the dorms forming the camp are now inoperative and decaying. At one time, each camp had a specific work purpose. With the mechanization of the cotton industry, only a small portion of inmates actually do farm work. There are no cells or partitions in most dorms. Beds are a yard apart with personal property lockers beneath them; and there is a commons area which serves as the dining hall, recreation area and meeting room. Parchman is an example of a correctional complex which houses all types of inmates in all grades of custody. It also has maximum-custody single cells for some 244 inmates.

If one matches the internal custody-level classification of prisoners with that of institutions, fewer than 50 percent of the inmates in maximum custody institutions are designated as maximum custody inmates. Table 3.3 summarizes the distribution of inmates by inmate security level and institution security level for the nation as a whole.

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* The prison is more fully described in Chapter II.

Table 3.3

Prisoner Population by Inmate and Institutional Security Level*

Inmate Security Level	Institutional Security Level			
	Maximum	Medium	Minimum	Prerelease
Maximum	86%	8%	2%	2%
Medium	2	73	43	-
Minimum	12	19	55	98
	100% (124,507)	100% (108,652)	100% (43,048)	100% (7226)

Source: PC-2

* Does not include approximately 8000 prisoners in local jails.

There are a number of regional differences in the proportion of prisoners in institutions of the four security levels. Figure 3.1 displays these distributions by region. There is a larger percentage of inmates in maximum custody institutions (and fewer medium custody institutions) in the North Central region than in any of the three remaining regions. The other regions have nearly matching percentages in maximum- and medium-custody housing. The Federal system represents a marked departure from the States' housing pattern. Only a third of its 31,876* inmates live in maximum custody facilities with 55 percent in medium custody and eight percent in minimum security facilities, and some seven percent in prerelease facilities.

The security-level distribution arrayed for the States appears not to suggest a patterened choice following thoughtful classification and assessment of program need. If one matches the internal, custody-level classification of prisoners with that of institutions, fewer than 50 percent of the inmates in maximum-custody

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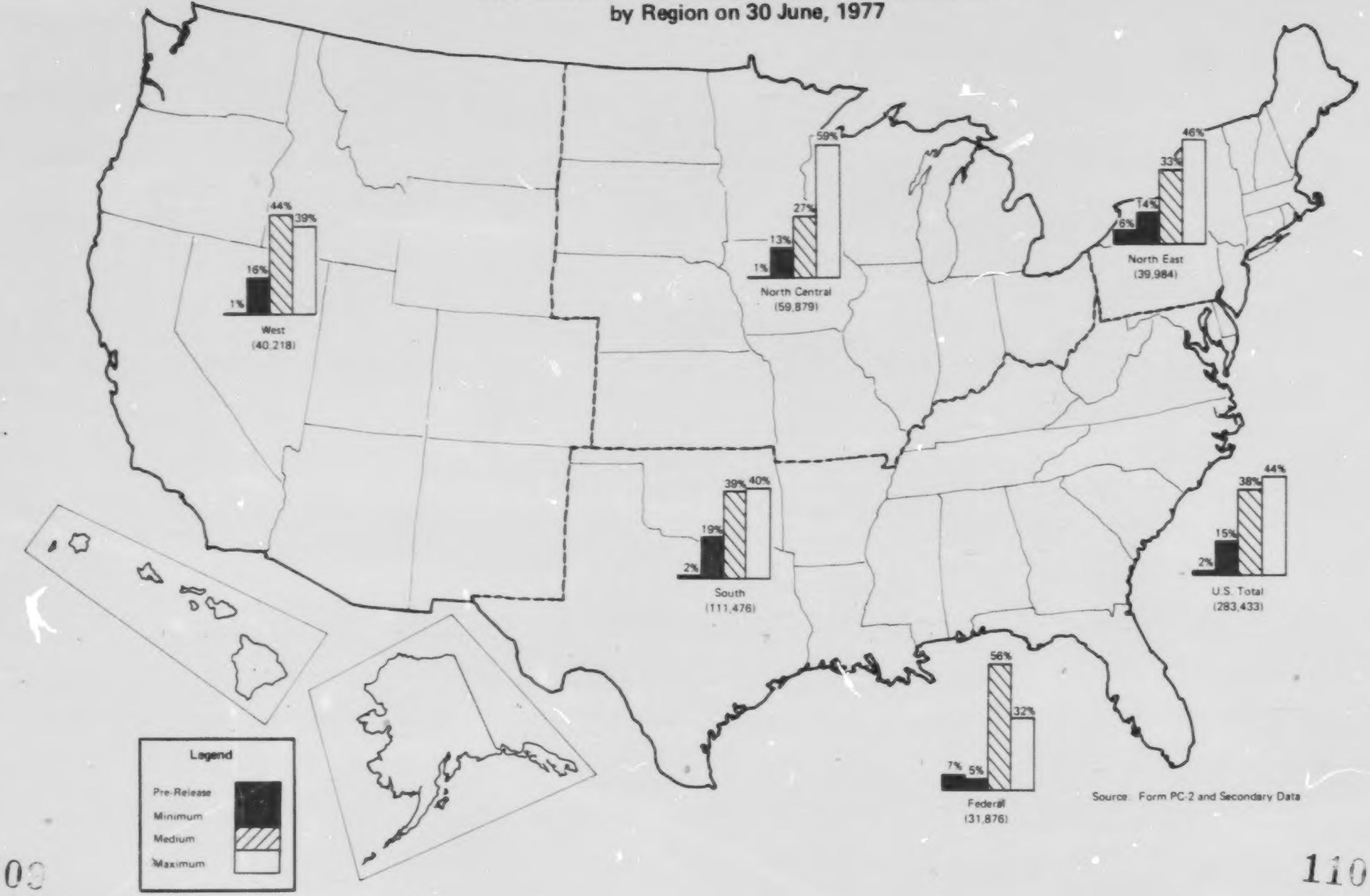
* This does not take into account an estimated 2000 prisoners held in local jails.

Figure 3.1

Distribution of Prisoners by Institutional Security Level by Region on 30 June, 1977


44%
39%
16%
1%
West
(40,218)
59%
27%
13%
1%
North Central
(59,879)
46%
33%
14%
6%
North East
(39,984)
39%
40%
19%
2%
South
(111,476)
44%
38%
15%
2%
U.S. Total
(283,433)
56%
32%
7%
5%
Federal
(31,876)
Legend
Pre-Release
Minimum
Medium
Maximum

Source: Form PC-2 and Secondary Data

institutions are designated as maximum-custody inmates. Table 3.3 summarizes the distribution of inmates by inmate security level and institution security level for the nation as a whole.

Greater insight regarding living conditions can perhaps be gained through analysis of prisoner distributions for each security level, by ages and sizes. As can be seen from Table 3.4, 66 percent of the population lives in maximum security institutions built prior to 1925. By contrast, only 24 percent and 19 percent respectively live in medium- and minimum-security facilities built prior to that date. Table 3.5 displays the distribution of prisoners by size of institution for each security level.

Table 3.4

Distribution of Prisoners by Age of Institution by Security Level of Institution

	Institutional Security Level			
Age of Institution	Maximum	Medium	Mininum	Pre-release
Prior to 1875	29%	6%	2%	6%
1875 to 1924	37	18	17	14
1925 to present	34	75	81	82
	100% (124,507)	100% (108,652)	100% (43,048)	100% (283,433)

Table 3.5

Distribution of Prisoners by Size of Institution by Security Level of Institution

	Institutional Security Level				
Size of Institution	Maximum	Medium	Minimum	Pre-release	Total
Less than 500	9%	21%	54%	27%	22%
500-999	17	31	16	23	22
1000 and over	74	49	30	0	56
	100% (124,507)	100% (108,652)	100% (43,048)	100% (7,226)	100% (283,433)

This table shows a decline, from 74 percent of prisoners living in maximum-security institutions holding 1000 or more, to 30 percent of prisoners in minimum-security facilities of that size. Complementing this are increases in the percentage of prisoners in small institutions as security level declines.

Regional Distribution by Size and Age of Institutions

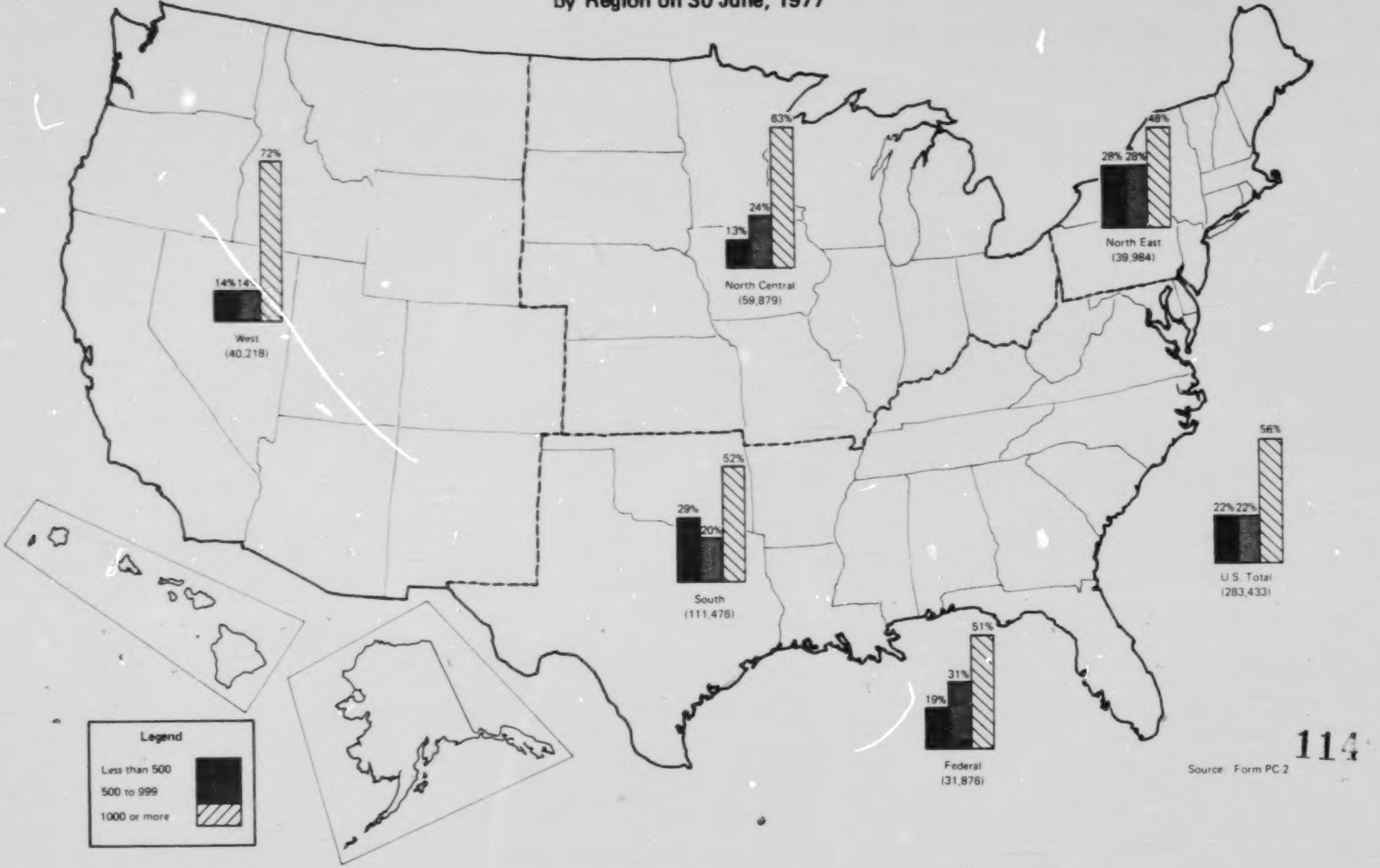
Regional differences also occur in the distribution of prisoners by size of institution. Figure 3.2 summarizes these distributions by region. The North Central and Western regions have greater percentages of prisoners in large institutions (inmate populations of at least 1000) than do the South and Northeast.

Almost 43 percent of the nation's prison population is confined in prisons over 50 years old. In examining age distribution by region, every region but the North Central confines from 39 percent to 43 percent of its prisoners in institutions more than 50 years of age; the North Central region confines nearly 60 percent in such institutions. Seventy-nine percent of the Federal system's prison population are housed in the newer institutions. These findings are summarized in Figure 3.3.

The large proportion of prisoners housed in newer facilities in the South may be a result of the many converted facilities now in use such as tents and modular or trailer units. Because of their adaptability in warmer climates and their relatively low cost, these facilities offered a quick means of responding to

Figure 3.2

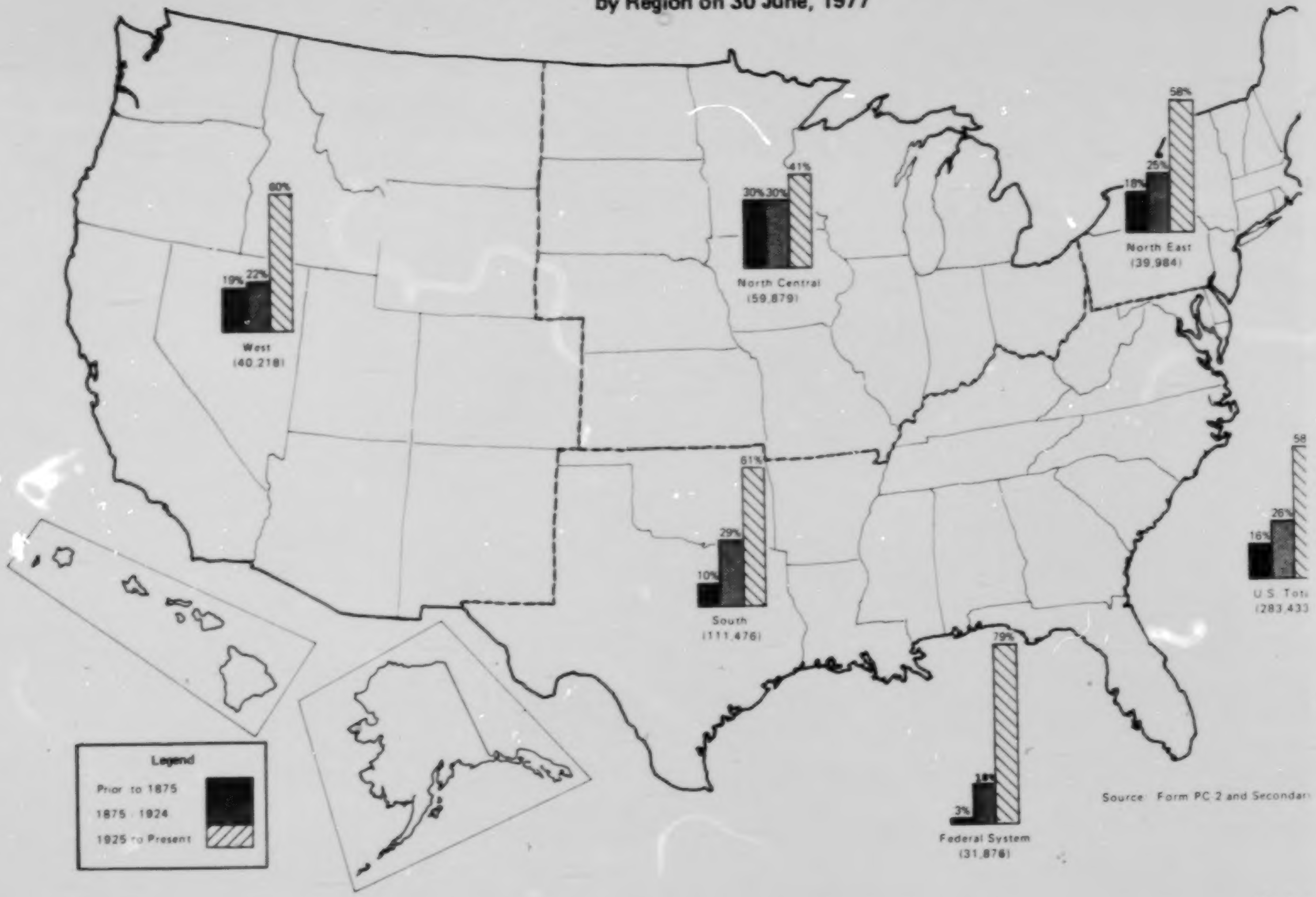
Distribution of Prisoners by Size of Institution by Region on 30 June, 1977


72%
14% 14%
West
(40,218)
63%
24%
13%
North Central
(59,879)
48%
28% 28%
North East
(39,984)
52%
29%
20%
South
(111,476)
51%
31%
19%
Federal
(31,876)
56%
22% 22%
U.S. Total
(283,433)
Legend
Less than 500
500 to 999
1000 or more

Source: Form PC 2

Figure 3.3

Distribution of Prisoner Population by Age of Institution by Region on 30 June, 1977



Source: Form PC 2 and Secondar

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rise in intake experienced in southern prison systems
years. This conversion program combined with a slower
rent permanent building program to produce the nation's
ercentage of inmates in younger facilities.

Life in a Cell

o provide more than statistical profiles of prisoners
n institutions, brief descriptions of prison life,
om case study materials, is provided in this section.

t the design of Cellhouse B in Stateville Penitentiary
in the preceding section) is of the inside cellblock
typical prison of this type will have two long rows
ells stacked back to back, three, four, or five tiers
ing a narrow common alleyway between them for mainten-
s.

end of a tier, automatic devices can open all the cell
hat level or "pop" individual cell doors. Group move-
meals, counts, work, recreation, etc.) are made along
tforms on each floor, usually in the same direction,
ny as five tiers emptying into one stairwell descend-
ground level.

n units permit neither individual radio nor record
In some, one will simply find no television or perhaps a
evision set up on the ground level for viewing by inmates
rows before the set. Another arrangement might find a
set(s) hung from a height over the flag facing the gal-
he audience might be in their cells on each balcony or
standing against the railing of the balcony platform.
ignal announcing lights-out, all return to their cells
hemselves in (which is later reinforced by the automatic
vice).

predictable periods in which the cells in a block are
pied. These periods are lights-out until breakfast
lockups following violence, the threat of it, or for
f a general shakedown (cell-by-cell search for contra-
ckups have been known to continue from a few days to
close to a year, with prisoners eating in their cells. This adds a new sanitation and health menace quite apart from the problem of managing the human problem of hundreds, perhaps thousands, of people in lockup status for any protracted period of time.

Some prisons, depending on wardens' policies, or as resources permit, allow radios, televisions or record players in cells (at prisoners' own expense). Some prisons supply earphone plug-in devices so that each convict can individually enjoy his program without having the sound compete with others. Others without such equipment simply permit each prisoner to play what he wishes, producing cacophonous reverberations in the cellblock. The cell door is typically a gate of bars, and, therefore, does not shield sound. The rest of the cellhouse construction, steel and concrete or brick, bounces rather than absorbs sound. The normal sounds of conversation, talking and yelling among cells, or between balconies adds to the din. Occasionally, this array of sounds is punctuated by orders barked by a guard from the flag, a loudspeaker, a bell indicating feeding time, the popping of a cell door, or the clanking opening or shutting of the large cellblock entrance gates.

During preparation for bedtime many noises are masked by each other. Still, with hundreds of men trying to fall asleep after lights-out, slight sounds take on a new importance. Loud whispers or soft chatter will bring on a loud warning from the on-duty guard on the flag which will be heard by most of the residents. A cough can reverberate through the cellhouse. A toilet flushing at 2 AM can be disquieting.

If relief from cell time comes only through assigned work programs each morning, one can easily imagine the accumulated tension which may develop when such opportunities are not available: for example, when lockups occur, and especially in cellblocks used exclusively for long-term lockup such as administrative, punitive, or protective segregation units. Prisoners in such units spend anywhere from a few days to a few years in locked cells, coming out for scheduled (not always uniformly followed) weekly showers and on some days for half-hour exercise periods.

The American Correctional Association, in its recently published standards, states that there should be one inmate per cell, which should be at least 60 square feet. The "at least 60 square feet" assumes that an inmate will spend no more than 10 hours per day in the cell. When such confinement goes above 10 hours, then the standard floor space per inmate becomes 80 square feet.[2] Based on data obtained from several prisons in the four case study States, it is highly unlikely that many States currently meet these requirements. For example,

- In South Carolina's Central Correctional Institution, almost all its cells are 58 square feet and are shared by two prisoners. Its maximum-custody prisoners spend 23 hours a day in the cells with an average of 29 square feet per person. The medium- and minimum custody inmates average 10 hours per day in double cells that offer 20-29 square feet per person.

- Fort Madison in Iowa has over 100 cells, each with 52.5 square feet of floor space. Prisoners in the general population average 11 hours of daily confinement, those in voluntary segregation average 17 hours, and those in punitive segregation status are locked up over 23 hours a day.

In a quite typical 6 by 8 foot or 6 by 9 foot (48 to 54 square feet) cell, actual floor space is encroached upon by the usual wall-hung bed and some sort of open toilet and wash sink in combination or separately mounted. The bed reduces floor space by about 18 square feet, and the toilet facilities by an additional four square feet. Frequently one finds a chair, table, and shelves which reduce the square footage again by up to another 10 square feet. This leaves 16-22 square feet of movement space. This is net, not usable, space. The net includes space between the table and toilet, or the table and bed, or the cell door and bed, all of which are normally inaccessible, and; therefore, constructively unusable.

A prisoner who is 5 feet 5 inches tall, standing in the center of his cell (facing the entrace) can extend his arms, and with no effort, touch both walls over the bed and desk. A prisoner is 6 feet tall or more will have to bend his arms at the elbows to accomplish the same task. The resourcefulness of some inmates' ability to store and mount books, records, toiletries, clothes, photos, mirrors, writing supplies, mail, food, recreational games, shoes, boots, linens, tobacco, and many other personal effects and papers strains the onlooker's imagination. Further creativeness is necessary to give the cell some semblance of individuality and attractiveness. This is accomplished through multicolor paint schemes (when wardens so permit), hangings of photos, pinups (by far the most frequent), or drapes covering the toilet or dividing a portion of the cell to give the illusion of privacy. Drapes also, sometimes (in violation of the prison rules), cover a portion or the entire barred entrance door, shielding the prisoner from the incoming light, birds, or simply the public view. One might also see newspaper or cardboard rolled up and jammed between the floor and the first set of horizontal crossbars of the cell door to prevent, or at least slightly discourage, cockroaches and vermin.

It does not take a great leap of the imagination to understand the devastating effect of double celling. Predictably, problems multiply geometrically. The assignment of a second prisoner is accomplished by stacking another bed hung directly over the first. The second bed, therefore, does not invade square footage (although it does encroach upon cubic footage). All other fixed cell amenities remain the same (toilet, sink, etc.), although shelf space sometimes increases. However, the second person and his personal belongings do play havoc with the concept of usable space. Social and psychological compression found in the one-man cell is now compounded by moving a stranger (or aquaintance) into the cell to share the intimacies of prison life. This means sharing the walls, shelves, sink, desk, and floor space.

Medium- and minimum-security institutions provide some relief and humaneness in architectural style. Some of those facilities were simply designated as having been built for other purposes (sometimes not even intended as correctional facilities). Dormitories or several-man cells are found in these two types of facilities. Dormitories can house from six men to well over 150 in single-bed or double-bunked arrangements. Some minimum facilities are arranged in single room complexes, such as Vienna, Illinois; or can be a dorm congregate living facility like Vandalia, Illinois.

Space does not permit a comprehensive description and analysis of the variety of medium and minimum facilities that exist in the nation. Briefly, there are fenced and unfenced institutions. Size can vary from a prerelease center of 10 or fewer to institutions of over 2000. These complexes may house prisoners in the variety of ways noted, but despite the American Correctional Association prescription of perimeter security that should accompany the medium and minimum institutions, one will find some with no perimeter security and others in the same designated custody level with armed guard towers. The prisoners will have different degrees of freedom within the institution, whether the latter has perimeter security or not.

Some of these medium and minimum facilities will have diversified programs ranging from academic education to vocational training, while others will be highly specialized in teaching a special skill. Still others are organized for specific purposes. These might include a factory, a forestry unit, a farm, cattle breeding, road construction, etc. A few facilities (or sometimes designated units within larger complexes) resemble a convalescent home dealing with aged or infirm prisoners.

Emergency Facilities

In recent years, emergency facilities have been quickly created, particularly in the South. for example, Florida housed approximately 200 prisoners in tents during its peak population periods. In Virginia, with the assistance of Federal funds, 96 trailer and modular units produced a 700-man facility. Similar units are being prepared for operation; defunct hospitals, mental facilities, juvenile institutions, and military installations have been converted into medium and minimum facilities to accommodate the current population crunch. Within institutions of any category, hallways, recreation rooms, and basements have been converted to dormitories.

Crowding has unfortunate effects on other aspects of the prison program: curtailed visiting, reduced recreation, slowdowns and long waits for showers and meals, overassignment of inmates to existing jobs, and idleness. With the usual lag in both hiring and adequate training of staff, the ratio of staff to inmates diminishes. Although a staff/inmate ratio may appear to be within American Correctional Association standards of 1/6, the staff figures could include supervisory staff and thus could inflate the figures approximately 20 percent. When a maximum-custody institution like Menard (1975) is calculated in this manner, the ratio becomes 1/7; as supervisory staff are deducted, the ratio turns to 1/9. In Illinois, Pontiac (1975), with supervisory staff is 1/3.8; without, it is 1/4.8. For the same year on a medium security institution, Vandalia, is 1/5.6 and 1/6.7, respectively.

Even accurate staff/inmate ratios may be misleading. While they appear adequate for the population, the architecture, poor deployment, heavy wall or perimeter coverage can all combine to produce poor interior security. For example, a cell house of 240 might have only three people on duty at what should be peak program periods (6:00-9:00 PM). This would yield a cellhouse ratio of 1/80 or more. Not surprisingly, such coverage ratios produce greater lockup periods for inmates. Yet, the reported ratio of the total prison in which this 1/80 ratio exists might be 1/6 or 1/7, when all other guards (not in cellblocks) are included. Such assignments and personnel might include supervision of the front entrance and hospital, gun towers, roving patrols, heavier coverage of disciplinary isolation, power house supervision, visiting supervision, and sergeants, lieutenants, and captains involved in supervision. The ratio may fall off even more precipitously on the midnight shift when only one guard is assigned to a cellhouse containing upward of 200 prisoners.

An Assessment of the Capacity of Correctional Institutions

In a narrow sense, capacity is determined by a comparison of supply and demand.* Phase I of our study was essentially limited to institutionally defined "rated capacity" for measuring supply; population measures reflect the demand side. Unfortunately, rated capacity figures are not based on physical measurement, but on the judgements of officials who assign them. This leads not only to variations among States, but within States as well. Using data obtained in our survey, this section begins with a discussion of the meaning of rated capacity and an analysis of the present rated capacity of State and Federal correctional institutions. Some space measurement data are presented at the conclusion of the section to shed light on the validity of rated capacity measures.

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* Of course, qualitative aspects of capacity and adequacy may be of equal or greater importance, depending on the nature of correctional objectives. These include, among other things, programs available and living conditions, both of which will be addressed in Phase II of the study.

A Discussion of Rated Capacity

Before proceeding with the analysis, it is critical that the notion of rated capacity be well understood. For each institution this value is assigned by individual institution management or by the central corrections agency in a State. Although a number of standards based on square footage have been proposed, there is no reason to believe that presently specified, rated capacities exhibit any degree of uniformity with respect to any of these.

Stateville Penitentiary (Illinois) can be used to illustrate problems associated with the use of rated capacity in judging the adequacy of America's prisons. Cells of roughly 60 square feet, designed to hold a single inmate, constitute the facility's primary housing space. On this basis, Stateville would have a capacity of 1392. As the population of Stateville grew during the fifties and early sixties, adjustments were made, and the rated capacity grew accordingly.

Since there were no major additions to the institution's physical dimensions during that period, it follows that there was a corresponding decline in space per inmate and in the quality of life in the cells. As reported in the case study* a ceiling of 2700--reported in our survey--was imposed by a Federal court on the number of inmates that could be held in that facility. Even so, this is nearly twice the number for which the institution was originally intended. By contrast, States or institutions may use originally conceived rated capacities in order to dramatize the need for Federal or State funding for additional bedspace.

Trenton State Prison (New Jersey) reports a rated capacity since 1970 of 172 and an average daily population that has declined steadily from 1329 in 1970 to 847 for 1976. There were 1016 prisoners on June 30, 1977. The gap between rated capacity and the number of inmates was explained in a note provided in the comments of the PC-2 form which we quote below in its entirety:

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* See Chapter II.

> Trenton Prison, built in part in 1840, has been condemned in commission reports going back to the 1920s. The 1840 design capacity is no longer appropriate. The Correctional Master Plan survey in 1976 revealed only 172 bedspaces with more than 50 square feet of space. The square footage reported above reflects this capacity. Unfortunately, and due to present severe overcrowding in New Jersey institutions, the remaining substandard space in this structure (130,487 sq. ft., including 31,575 sq. ft. in cell space) is still being used.

California's Department of Corrections proposal to the Joint Legislative Budget Committee of the California State Legislature computed "occupancy level" on the basis of "active beds."[3] The number of active beds is determined by subtracting the number of beds "deactivated" because of declining inmate populations from the design capacity. The occupancy level for December 31, 1976 using male active beds was 92 percent, but using the design capacity, it would have been 85 percent. For female beds, the percentages were 88 and 77 percent respectively.

It is therefore important to note that terms such as "surplus" and "deficit" in bedspace are used for convenience, and should only be understood as suggestive of the capacity data that might be collected with more time, using a uniform standard.

Survey Results: Rated Capacity

Table 3.6 displays June 30, 1977 State provided rated capacities and prison populations for the four regions displayed in Table 3.1 and for the Federal Bureau of Prisons. For the nation as a whole on June 30, 1977, there were some 13,000 more prisoners in State correctional institutions than rated capacity of these facilities. In the Federal system, population exceeded rated capacity on that date by nearly 7500. The South, having more than its share of prisoners, not surprisingly has the greatest deficit in rated capacity. The North Central region also shows a deficit with the Northeast and West showing a slight surplus.

Table 3.6

Difference Between Rated Capacity and Prison Population by Region for June 30, 1977

Region	Rated Capacity (1)	Prison Population (2)	Difference (1) - (2)
Northeast	40,432	39,984	+ 448
North Central	56,629	59,879	- 3250
South	100,657	111,476	-10,819
West	40,640	40,218	+ 422
Federal	24,410*	31,876*	- 7466
Total	262,768	283,433	-20,665

Source: PC-1 and PC-2

* Includes an estimated 1500 beds and inmates in contracted prerelease facilities.

Table 3.7 displays June 30, 1977 rated capacities and prison populations for the 50 States and the District of Columbia. As suggested by Table 3.6, of the 10 States showing the worst deficit (and accounting for about 33 percent of all States' prison population), six are in the South and three are in the North Central region.

In order to contour these gross statistics, cells rated to hold one person (i.e., a rated capacity of one) were analyzed separately.* Table 3.8 shows that on June 30, 1977, Federal and State correctional institutions held approximately 127,800 prisoners in 126,700 cells rated to hold one person, a deficit of 1128, less than one percent of the total number of cells rated to hold one person. Thus, 45 percent of the nation's Federal and State inmates occupy cells rated to hold one person. There is tremendous range in the percent of the population in cells rated to hold one person, from 23 percent in the South to 84 percent in the northeastern region of the United States.

Figures 3.4 through 3.6 show a higher percentage of inmates in cells rated to hold one person in institutions over 100 years old, larger institutions, and maximum-security institutions. The

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* Note that single cells originally designed for one person, but presently double or triple bunked, may not have been included in the count of cells rated for one.

Table 3.7

Difference Between Rated Capacity and Prison Population by State for June 30, 1977

State	Rated Capacity (1)	Prison Population (2)	Difference (1) - (2)	State	Rated Capacity (1)	Prison Population (2)	Difference (1) - (2)
Florida	14365	18907	-4542	Maine	712	711	1
Michigan	11476	14451	-2975	Delaware	979	967	12
South Carolina	4531	6775	-2244	Arkansas	2561	2543	18
Maryland	5244	7379	-2135	Massachusetts	2734	2687	47
New Jersey	4886	6748	-1862	Iowa	2088	2035	53
Tennessee	3508	5225	-1717	South Dakota	540	478	62
Oklahoma	2500	3775	-1275	Wyoming	406	343	63
Georgia	7635	8799	-1164	Connecticut	3341	3263	78
Missouri	3890	5003	-1113	New Hampshire	349	265	84
Indiana	4109	5058	- 949	Vermont	482	397	85
Arizona	2050	2971	- 921	Mississippi	1802	1715	87
Kentucky	2867	3715	- 848	North Dakota	350	227	123
Oregon	2351	2901	- 550	Alaska	499	364	135
Louisiana	4900	5422	- 522	Rhode Island	748	606	142
New Mexico	1145	1640	- 495	Alabama	3489	3323	166
Washington	3487	3950	- 463	Dist. of Columbia	2720	2540	180
North Carolina	10980	11436	- 456	Colorado	2454	2240	214
Wisconsin	3103	3344	- 241	Montana	830	583	247
Idaho	648	750	- 102	Minnesota	2015	1716	299
Nevada	820	908	- 88	Nebraska	1846	1462	384
Hawaii	443	527	- 84	Pennsylvania	8024	7542	482
Illinois	10650	10729	- 79	W. Virginia	1944	1247	697
Kansas	2195	2231	- 36	New York	19156	18265	891
Utah	847	880	- 33	Virginia	7936	6999	937
				Texas	22696	21107	1589
				Ohio	14367	12645	1722
				California	24660	21763	2897

Source: PC-1 and PC-2

Table 3.8

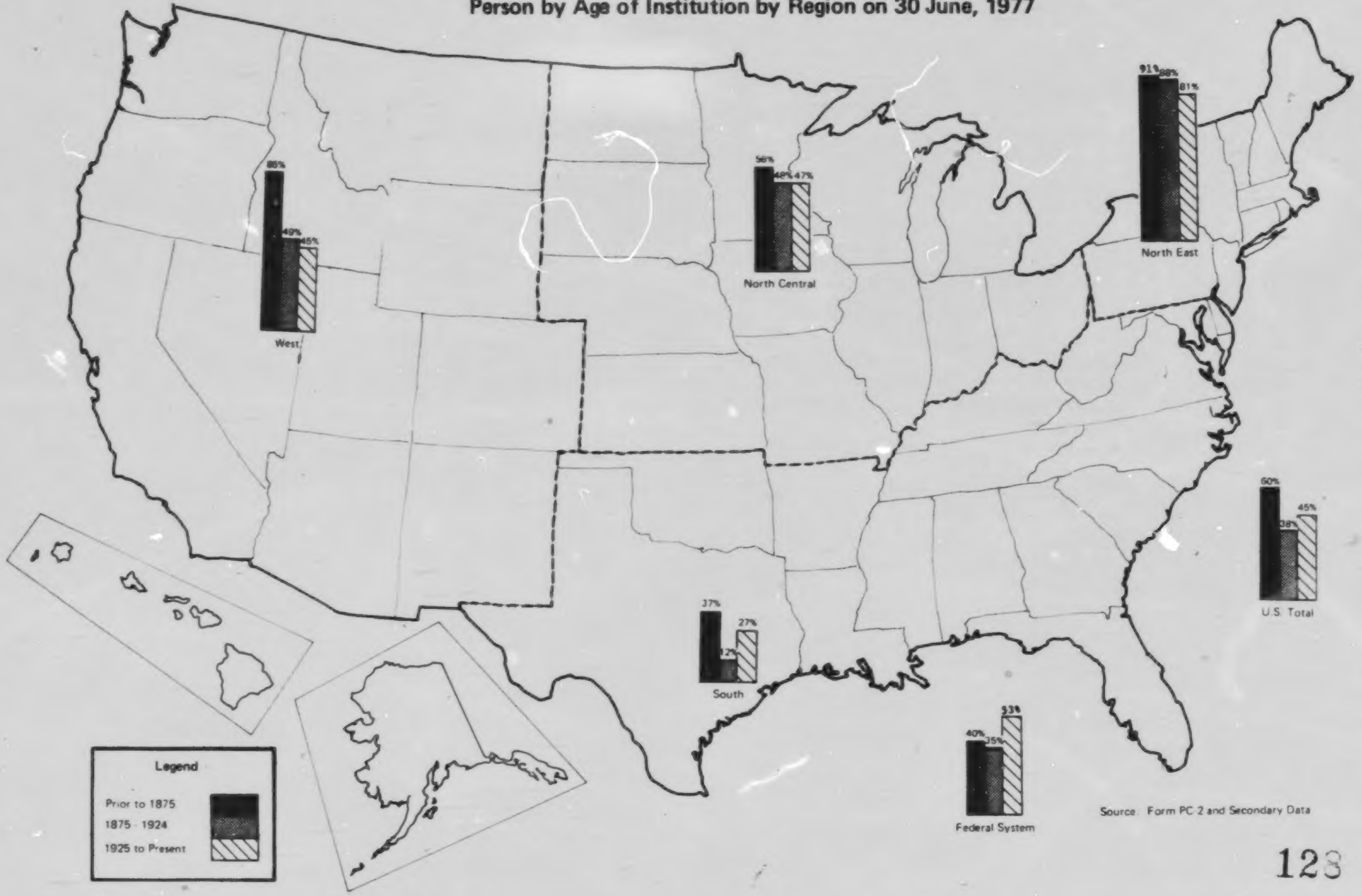
Number of Cells Rated to Hold One Person and the Number of Inmates in These Cells by Region

Region	Total Prison Population	Percent of Population in Cells Rated to Hold One Person	Number of Cells Rated to Hold One Person	Number of Inmates in Cells Rated to Hold One Person	Difference (1) - (2)
Northeastern	39,984	84%	36,280	33,827	2453
North Central	59,879	49	28,919	30,905	-1986
South	111,476	23	23,098	24,700	-1602
West	40,218	54	23,570	22,590	980
Federal	31,876	47	14,817	15,790	-973
Total	283,433	45%	126,684	127,812	-1128

Source: PC-2

Figure 3.4

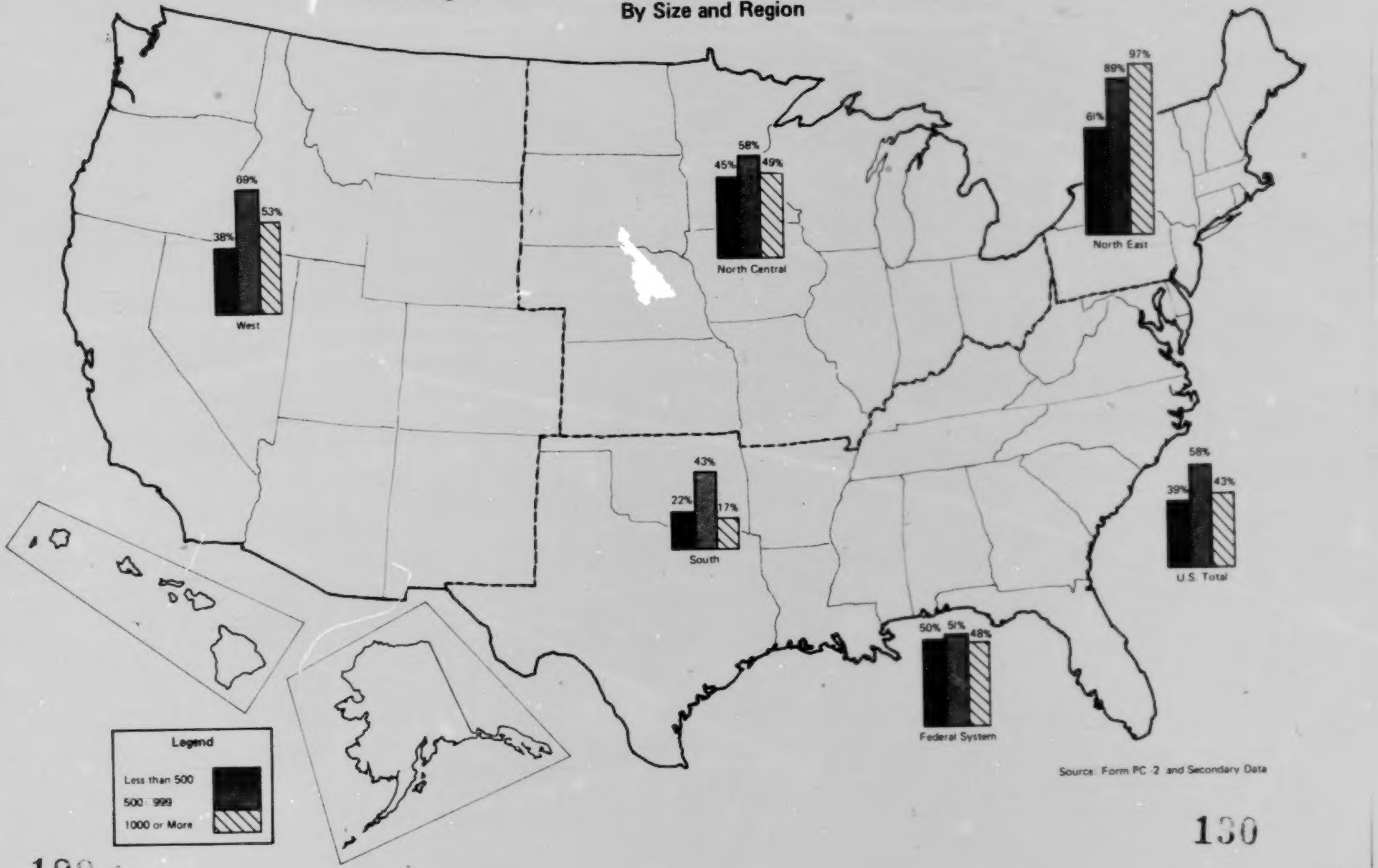
Percentage of Total Inmate Population in Cells Rated to Hold One Person by Age of Institution by Region on 30 June, 1977


86%
49%
45%
West
56%
48%
47%
North Central
91%
88%
81%
North East
37%
12%
27%
South
40%
35%
53%
Federal System
60%
38%
45%
U.S. Total
Legend
Prior to 1875 ■
1875 - 1924 ▨
1925 to Present ▧

Source: Form PC-2 and Secondary Data

Figure 3.5

Percentage of Total Inmate Population in Cells Rated to Hold One Person By Size and Region

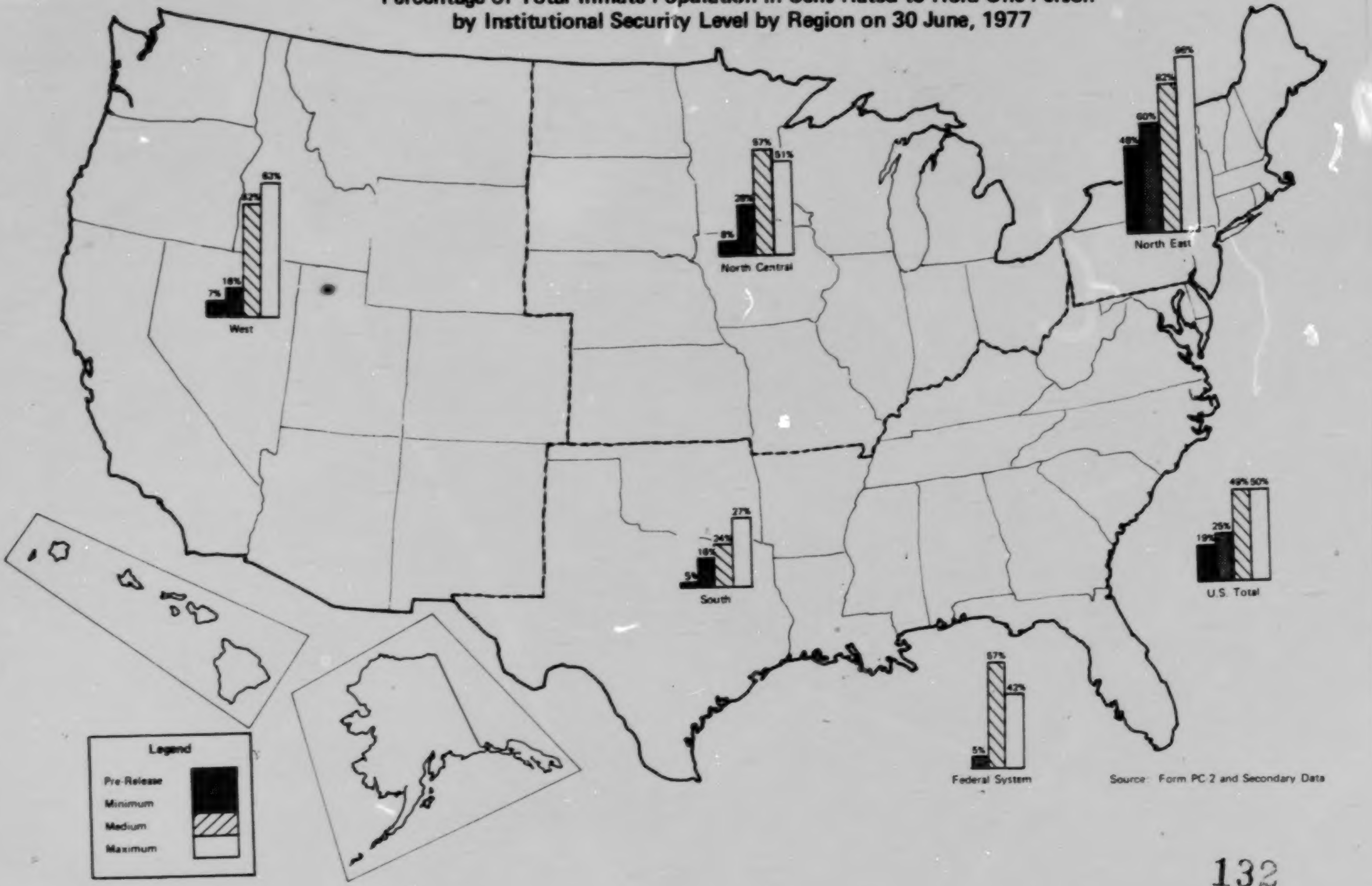


38%
69%
53%
West
45%
58%
49%
North Central
61%
89%
97%
North East
22%
43%
17%
South
50%
51%
48%
Federal System
39%
58%
43%
U.S. Total
Legend
Less than 500
500 - 999
1000 or More

Source: Form PC-2 and Secondary Data

Figure 3.6

Percentage of Total Inmate Population in Cells Rated to Hold One Person by Institutional Security Level by Region on 30 June, 1977


7%
18%
42%
62%
West
8%
28%
57%
51%
North Central
48%
60%
82%
96%
North East
5%
18%
24%
27%
South
19%
25%
49%
50%
U.S. Total
5%
57%
42%
Federal System
Legend
Pre-Release
Minimum
Medium
Maximum

Source: Form PC 2 and Secondary Data

Northeast has 60 percent of the inmates in minimum-security in cells rated to hold one person compared with a range of five to 28 percent for the other regions and the Federal Bureau of Prisons. A preliminary analysis of institutional-level responses suggests that these figures are in part due to the net result of many prisoners who are doubled up in their single cells, and some institutions that have empty cells.

Figures 3.7 through 3.9 display the average number of square feet for inmates in cells by age, size, and security level of institutions. Again, a consistent pattern emerges across all regions--larger, older, and more secure Federal and State facilities tend to have the least space per inmate.*

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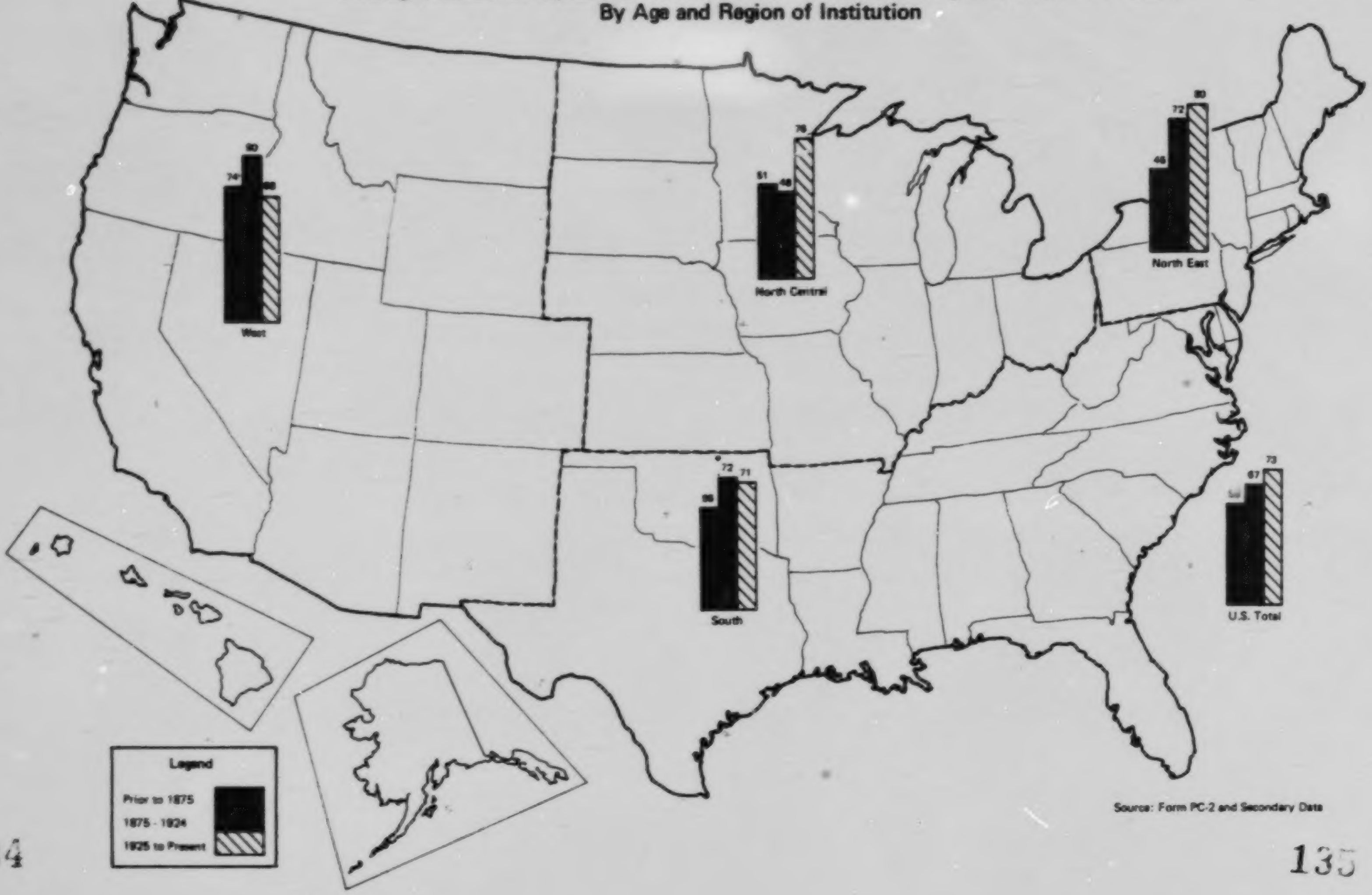
* Only a preliminary analysis of the data on square footage was possible for this report.

Figure 3.7

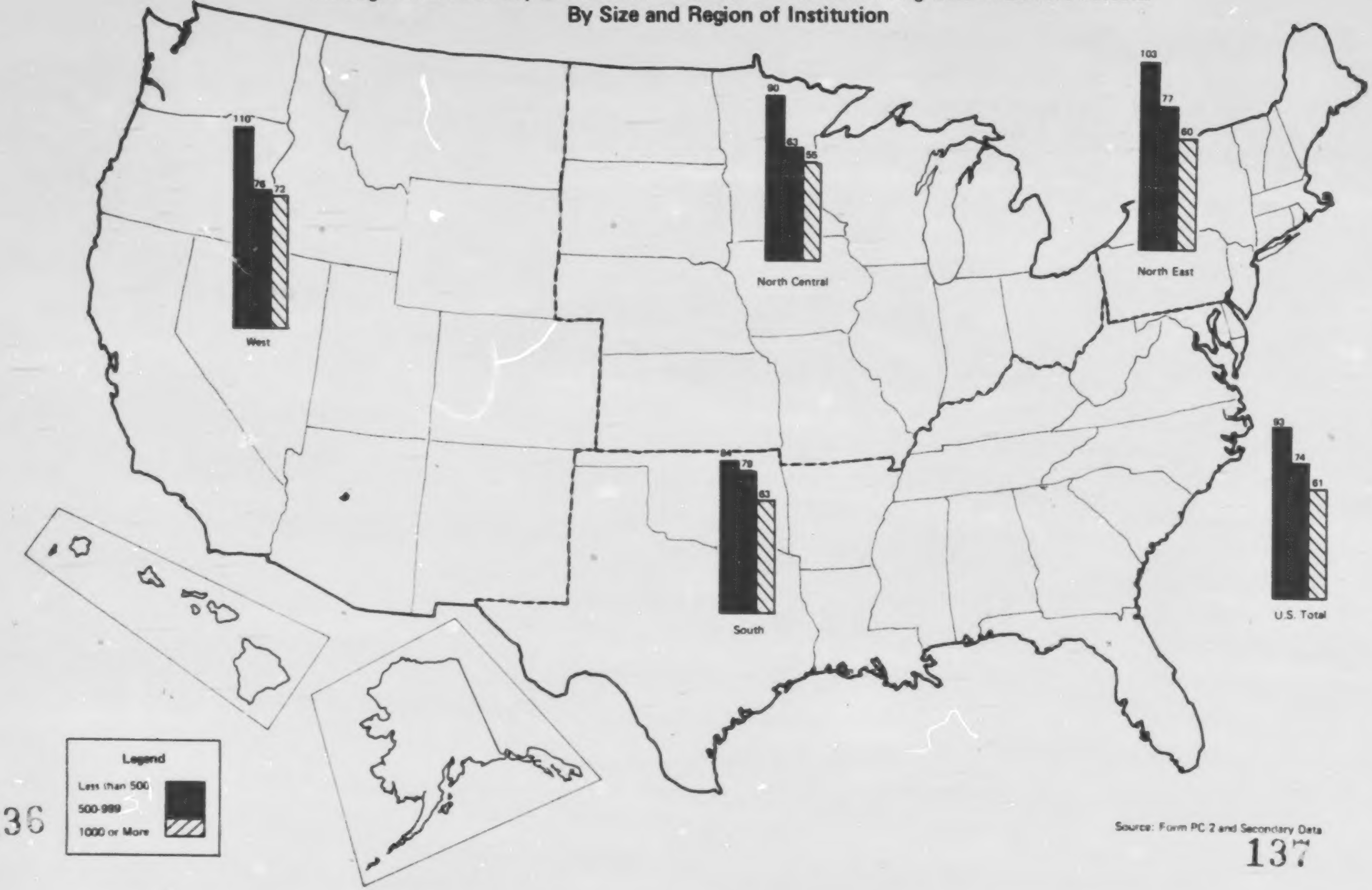
Average Number of Square Feet for Inmates in Cells Containing Less Than Five Persons By Age and Region of Institution


74
90
68
West
51
48
76
North Central
46
72
80
North East
66
72
71
South
58
67
73
U.S. Total
Legend
Prior to 1875
1875 - 1924
1925 to Present

Source: Form PC-2 and Secondary Data

Figure 3.8

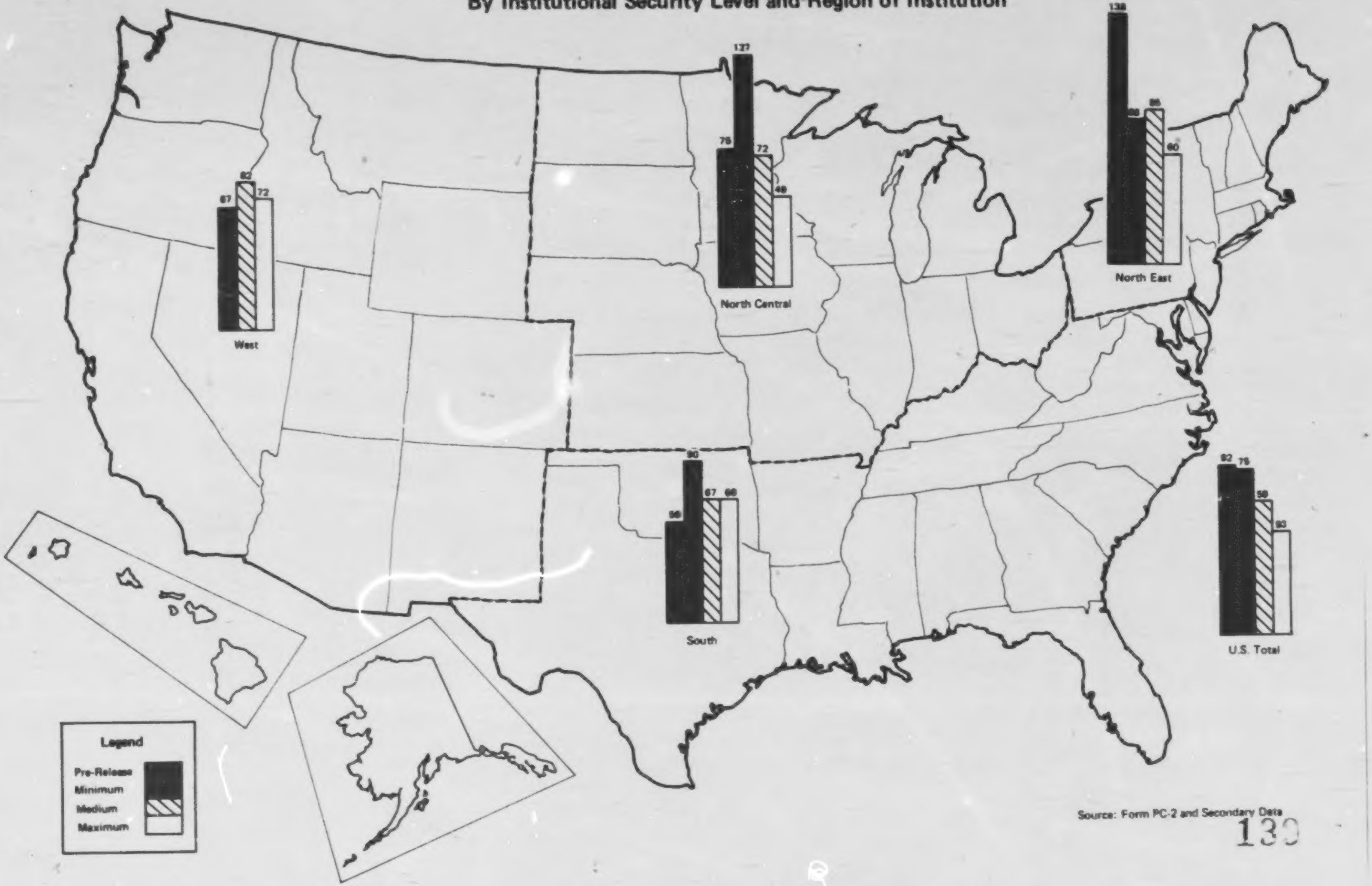
Average Number of Square Feet for Inmates in Cells Containing Less Than Five Persons By Size and Region of Institution



Source: Form PC 2 and Secondary Data

Figure 3.9

Average Number of Square Feet for Inmates in Cells Containing Less Than Five Persons By Institutional Security Level and Region of Institution



Source: Form PC-2 and Secondary Data

Prisoners in Residential Community-based Programs

The extent to which imprisonment is used depends in part upon the perceived availability of suitable sentencing alternatives. Of primary importance in this respect is the use of probation orders, with or without additional conditions. As noted in Chapter III, there is considerable variation from State to State in the development of probation services. In some instances, as in California, probation subsidy schemes have been used as ways of both improving the quality of probation supervision and reducing rates of commitment to prison. An important research issue is the extent to which sentencing options to prison actually serve that purpose, rather than merely supplementing existing institutional arrangements. Examination of this and associated issues with regard to the use of probation will be explored in Phase II of this study.

The study's examination of community-based corrections during Phase I has been confined to residential community-based programs operated by or under contract to departments of corrections. The survey of Federal and State corrections was concerned only with persons under the jurisdiction of these agencies. Despite the considerable attention devoted to community-based corrections in professional journals and the media, the survey results dramatically confirm that in terms of absolute numbers, and in percentage of prisoners involved, these residential programs are in a very embryonic stage of development. The responses to the survey identified a total of 8,517 individuals in community-based corrections programs.*

Most of these programs are described as prerelease centers, providing a transitional residence for prisoners in the final stage of their sentence. In other instances, the program might best be described as farms or road gangs.

The survey data indicate that 27 states and the Federal Bureau of Prisons directly operate such programs. Only four states (Alabama, Illinois, Missouri, and New Jersey) and the Federal system reported having 10 or more programs; nine states reported having only one. Seven states and the Federal Bureau of Prisons reported contracts with privately operated residential centers. Of particular significance to this study is the finding that most of the centers directly operated by corrections departments are well below their rated capacity.* Twenty-two out of 27 jurisdictions reported, on an aggregated basis, that capacity exceeded occupancy by 823 beds. (Data were not available from one jurisdiction.) Only Missouri and New Jersey reported overcrowding in State-oriented prerelease/work release facilities (188 inmates for a rated capacity of 140 and 992 inmates for a rated capacity of 781 respectively). Oregon and Washington were both slightly overrated capacity.

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* Six hundred eighty-seven of these were Federal prisoners, held in 12 community-based centers; there are also 1,500 Federal prisoners in contracted prerelease facilities, and these persons are excluded from this analysis.

There are a number of ironies concerning the data. First, at a time of prison crowding, such centers are underutilized. Second, in several jurisdictions where the crowding problem is especially severe, there are no, or very few, programs of this sort. Finally, even if existing centers were fully occupied, they would have very little impact on the overall prison population situation. Total nationwide capacity, in centers directly operated by corrections departments in the survey, was less then 10,000 beds.

Plans for Prison System Expansion and Renovation

In addition to information on present capacities, the survey sought to collect data on plans for prison system expansion through new construction, renovation, or acquisition and on system contraction through closings or changes in utilization.** Specifically, respondents provided data on the number of beds to be added or removed per year, from 1977 through 1982. In addition, estimated costs for proposed capital investments were provided.

For a number of reasons, considerable care should be exercised in interpreting the responses that cover a range of possibilities, from building actually underway to long-term plans for which appropriations have still to be requested. First, the estimates of the number of beds added and the associated costs generally refer to projects that will be completed (and in some cases, started) in the future. They are therefore subject to the vagaries of both financial and political support, the impact of rising construction costs, changes in the notions of what constitutes either sound correctional practice or appropriate standards, and the general uncertainty associated with any planned project.

Second, although the data is presented in terms of beds, this is not a standardized measure of correctional capacity. As discussed earlier, a bed might be located in a maximum- or minimum-security prison, or in a reception unit, camp, work release center, or industrial training center. A group of beds may be part of a program to construct a new State correctional facility or may simply be included in an addition to an existing prison. Costs associated with adding beds may involve nothing more than remodeling and renovating a presently inadequate building; on the other hand they may include land acquisition, building and road construction, and equipment purchase. Consequently, inferences about States' plans to add beds, and their associated costs, must be made with great care.

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* Data on capacity were not available with regard to privately operated centers.

** See Technical Appendix, Form PC-1.

Planned Bed Expansion

Table 3.9 indicates the June 30, 1977 rated capacity, the number of beds to be added, the number of beds to be closed, the net difference, cost estimates, and rated capacity in 1982. In no case was there a net reduction of beds in any system over the six-year period. Occasionally, matched additions and removals (usually associated with renovation) were reported.

Figures 3.10 through 3.14 plot past and current rated capacity from December 31, 1972 to December 31, 1982 and past prison population to December 31, 1976 for each region and the Federal prison system. With the exception of the South, the planned rated capacity increase shows a modest increase between now and the end of 1982. The South, in contrast, shows a sharp increase in rated capacity over this period. There was a close correspondence between the number of prisoners and rated capacity on December 31, 1976 for the three non-Southern regions and as shown in Table 3.7, this is still the case for the Northeast and Western regions. The North Central region shows a deficity of over 3,000 beds on June 30, 1977, while the South has shown a deficit since early 1974 that now stands at nearly 11,000 beds at midyear. Since 1972, the Federal system has consistently had more inmates than beds; without a drop in the number of Federal prisoners, this seems likely to continue into the foreseeable future.

On June 30, 1977, the rated capacity of State and Federal prisons in the United States was 261,268 beds. By 1982, planned net additions to this capacity as reported in this survey come to 62,194 (i.e., an increase of 24 percent). In terms of volume of planned net additions, five States (Florida, Louisiana, Michigan, South Carolina, and Texas) are the leaders with a combined total of almost half the planned net increase. With the exception of Texas, which showed a surplus of some 1600 on June 30, 1977, these States match those showing the largest deficits in rated capacity. On the other hand, Colorado, the District of Columbia, Hawaii, Iowa, Minnesota, New Hampshire, North Dakota, Ohio, South

Table 3.9

Estimated Costs of Planned Prison Construction, Renovation, or Acquisition Between 30 June 1977 and 31 December 1982, by Region and State

Region and State	Rated Capacity 6-30-77	Number of New Beds[1] Total	Cost Data not Available	Cost Data Available	Number of beds Removed	Net Increase of Beds	Total Costs (Millions)	Cost Per Bed (Thousands)	Rated Capacity 12-31-82
United States, TOTAL	261,268	66,799	18,805	47,994	4,605	62,194	1,089.3	22.7	324,962
Federal Institutions, TOTAL	22,910	3,269	0	3,269	1,050	2,219	103.5	31.7	26,629
State Institutions, TOTAL	238,358	63,530	18,805	44,725	3,555	59,975	985.8	22.0	298,333
Northeast	40,433	5,402	4,786	616	202	5,200	18.3	29.7	45,633
Maine	712	300	300	0	202	98	-	-	810
New Hampshire	349	0	0	0	0	0	-	-	349
Vermont	682	74	56[2]	18	0	74	0.1	6.9	756
Massachusetts	2,734	1,180	1,180	0	0	1,180[3]	-	-	3,914
Rhode Island	748	418	0	418	0	418	10.2	24.4	1,166
Connecticut	3,341	0	0	0	0	0	-	-	3,341
New York	19,156	1,488	1,488	0	0	1,488	-	-	20,644
New Jersey	4,886[4]	1,762	1,762	0	0	1,762	-	-	6,648
Pennsylvania	8,024	180	0	180	0	180	8.0	44.4	8,204
North Central	56,629	12,047	2,555	9,492	484	11,563	294.4	31.3	68,192
Ohio	14,367	0	0	0	0	0	-	-	14,367
Indiana	4,109	1,310	1,200	110[5]	0	1,310	0.5	4.3	5,419
Illinois	10,650	2,550	0	2,550	0	2,550	59.4	23.3	13,200
Michigan	11,476	3,835	435	3,400	0	3,835	111.5	32.8	15,311
Wisconsin	3,103	1,356	350	1,206	484	1,072	29.1[6]	24.1	4,175
Minnesota	2,015	0	0	0	0	0[7]	-	-	2,015
Iowa	2,088	0	0	0	0	0	-	-	2,088
Missouri	3,890	1,054	554	500	0	1,054	36.6	34.7	4,944
North Dakota	350	0	0	0	0	0	-	-	350
South Dakota	540	0	0	0	0	0	-	-	540
Nebraska	1,846	1,242	16	1,226	0	1,242	38.5	31.4	3,088
Kansas	2,195	500	0	500	0	500	18.5	37.0	2,695
South	100,657	37,320	8,282	29,038	1,297	36,023	517.7	17.8	136,680
Delaware	979	93	0	93	4	88	0.5	5.4	1,067
Maryland	5,244	2,360	890	1,470	0	2,360	44.3	30.0	7,604
District of Columbia	2,720	0	0	0	0	0	13.0	-	2,720
Virginia	7,936	1,760	200	1,560[8]	0	1,760	29.6	19.0	9,696
West Virginia	1,944	0	0	0	0	0	-	-	1,944
North Carolina	10,980	1,442	0	1,442	0	1,442	23.8[9]	16.5	12,422
South Carolina	4,531	3,936	0	3,936	293	3,643	57.0[10]	14.5	8,174
Georgia	7,635	3,440	3,440	0	0	3,440	-	-	11,075
Florida	14,365	5,325	0	5,325	0	5,325	77.6	14.6	19,690
Kentucky	2,867	385	0	385	0	385	19.0	49.4	3,252
Tennessee	3,508	800	0	800	0	800	12.0	15.0	4,308
Alabama	3,489	2,528	60[11]	2,468	0	2,528	38.0	15.4	6,017
Mississippi	1,802	1,296	1,296	0	0[12]	1,296	-	-	3,098
Arkansas	2,561	376	376	0	0	376	-	-	2,937
Louisiana	4,900	4,660	0	4,660	500	4,160	125.4[13]	26.9	9,060
Oklahoma	2,500	2,020	2,020	0	500	1,520[14]	-	-	4,020
Texas	22,696	6,900	0	6,900	0	6,900	78.0	11.3	29,596
West	40,640	8,761	3,182	5,579	1,572	7,189	155.4	27.8	47,829
Montana	830	114	0	114	0	114	3.9	34.0	944
Idaho	648	362	74	288	0	362	2.4	8.5	1,010
Wyoming	406	554	50	504	406	148	25.0	49.6	554
Colorado	2,454	1,026	0	1,026	800	226	19.6	19.2	2,680
New Mexico	1,145	150	150	0	0	150	-	-	1,295
Arizona	2,050	2,722	128[11]	2,594	336	2,386	67.9	26.2	4,436
Utah	847	235	0	235	0	235	1.0	4.2	1,082
Nevada	820	544	0	544	30	514	23.8[15]	43.7	1,334
Washington	3,487	494	350	144	0	494	10.5	72.9	3,981
Oregon	2,351	130	0	130	0	130	1.3	10.0	2,481
California	24,660	2,400	2,400	0	0	2,400	-	-	27,060
Alaska	499	30	30[11]	0	0	30	-	-	529
Hawaii	443	0	0	0	0	0	-	-	443

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[1] Mid-points were used when ranges were provided by the states.

[2] The number of beds to be added had to much of a range for a meaningful cost estimate.

[3] The planned increase will allow for the gradual abandonment of existing inadequate facilities

[4] The rated capacity figure includes space for 359 juveniles.

[5] There were no costs involved for 40 work release beds in Michigan City.

[6] An additional cost of $1,000,000 was given for advance planning and design of a new maximum security institution.

[7] During the next five years Minnesota plans to decrease its capacity in some institutions and possibly utilize juvenile facilities for adults, thus maintaining its current rated capacity.

Source: PC-1

[8] Some construction depends on the passage of a bond referendum in November 1977.

[9] An additional cost of $24,037,000 was given for renovation of existing facilities.

[10] Cost for additions to existing institutions include some renovation costs as well as add-on construction.

[11] Leased facility.

[12] Camps 8 (134 beds) and 9 (76 beds) will close during the last half of 1977. This does not result in a drop in the 30 June 1977 rated capacity.

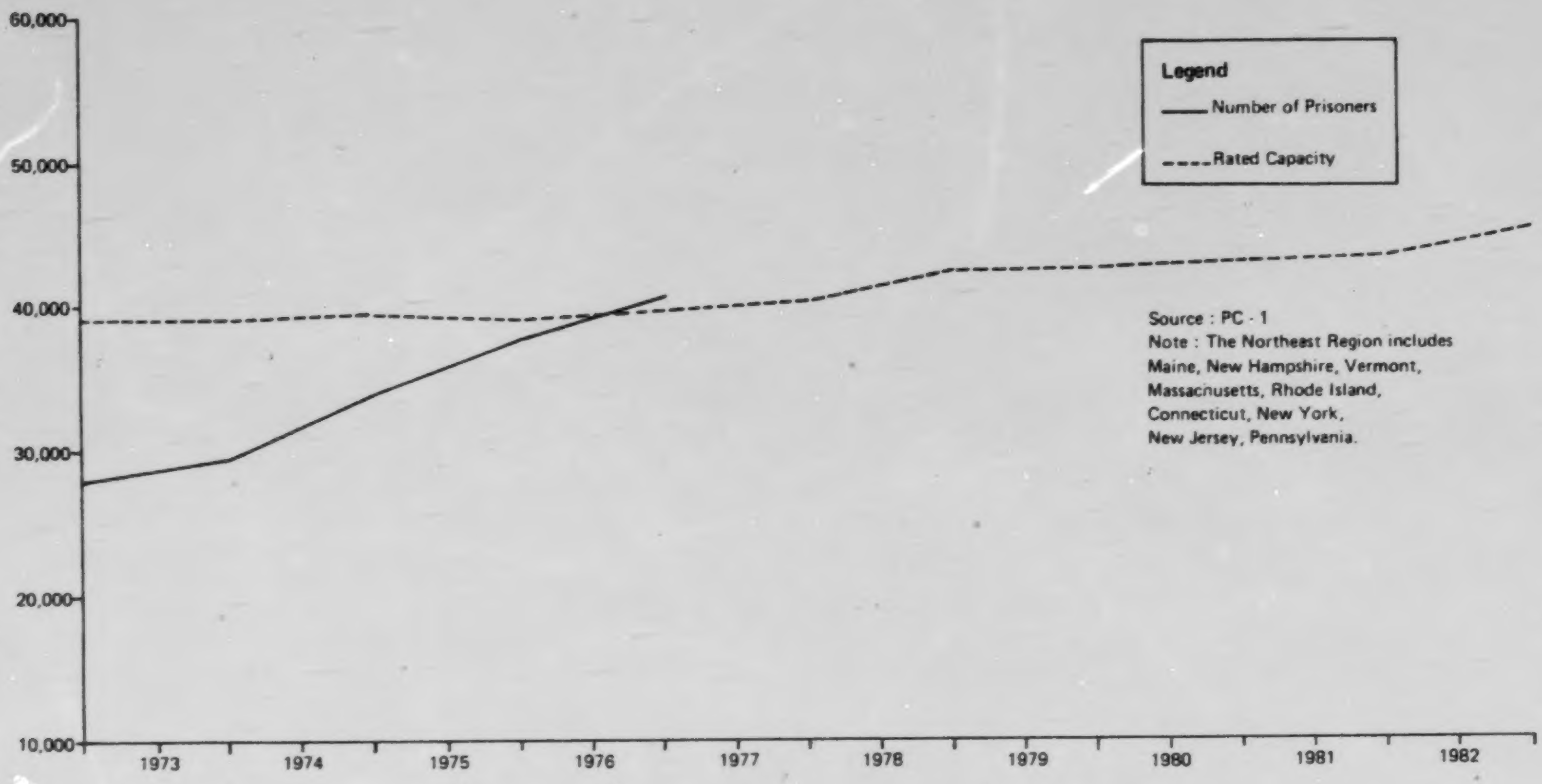
[13] An additional cost of $6,000,000 was given for new land acquisition, construction and equipment in Orleans Parish.

[14] There are tentative plans for a Geriatrics Unit at McAlester.

[15] An additional cost of $8,522,400 was given for renovation of existing facilities.

Figure 3.10

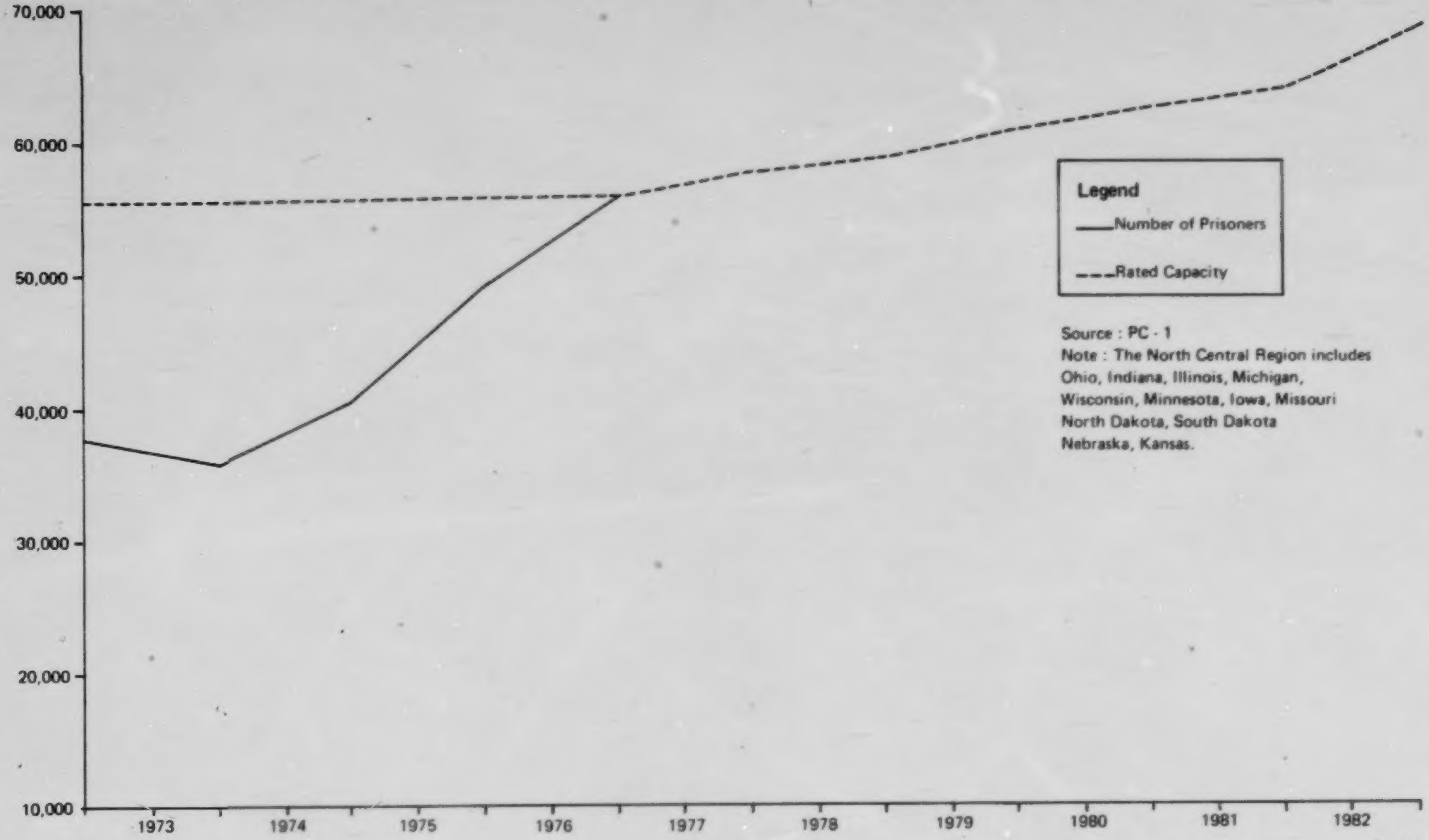
Number of Prisoners and Rated Capacity
of the Northeastern Region of the United States: 1972-1982



Source : PC - 1
Note : The Northeast Region includes
Maine, New Hampshire, Vermont,
Massachusetts, Rhode Island,
Connecticut, New York,
New Jersey, Pennsylvania.

Figure 3.11

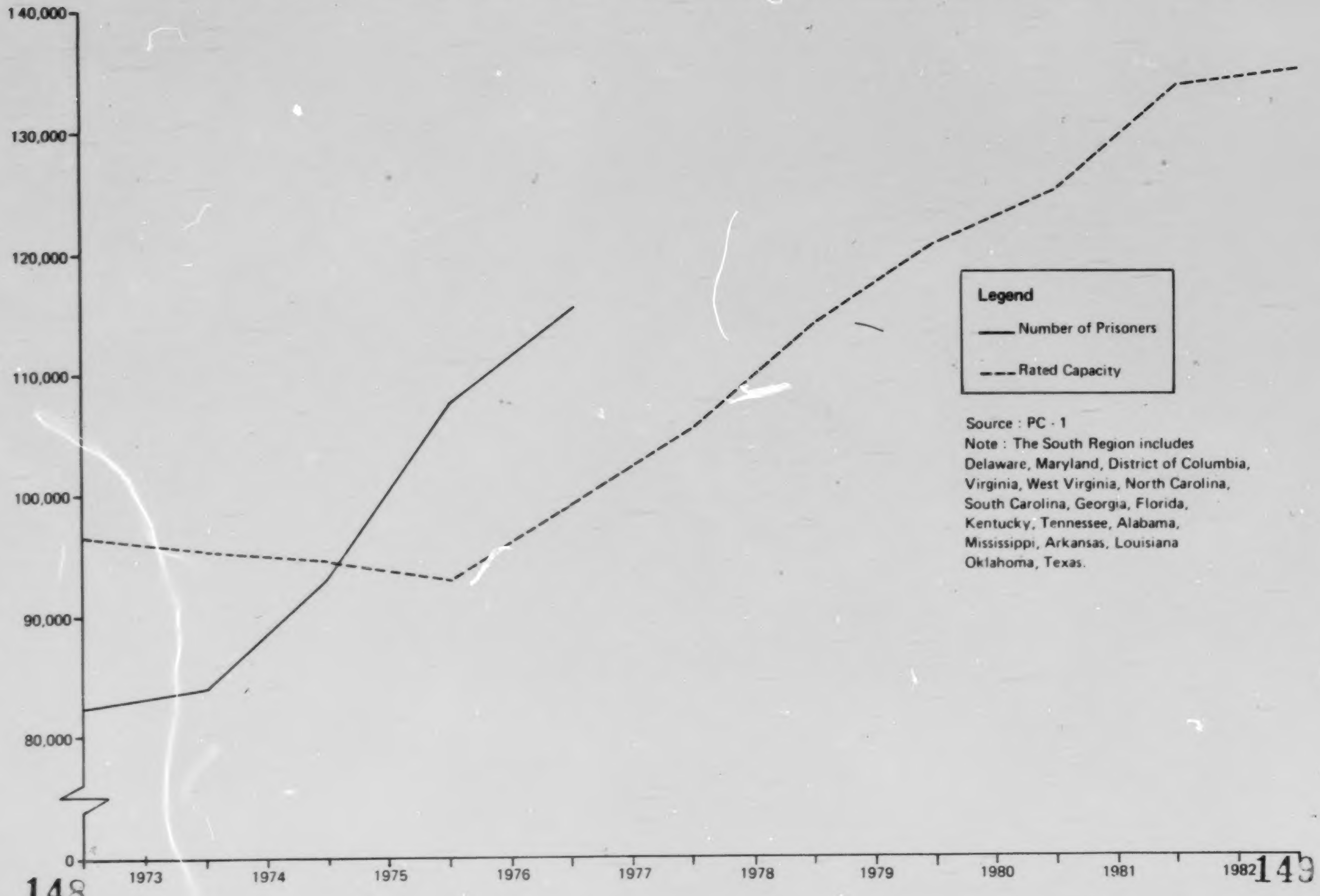
Number of Prisoners and Rated Capacity of the North Central Region of the United States: 1972-1982



Source : PC - 1
Note : The North Central Region includes Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri North Dakota, South Dakota Nebraska, Kansas.

Figure 3.12

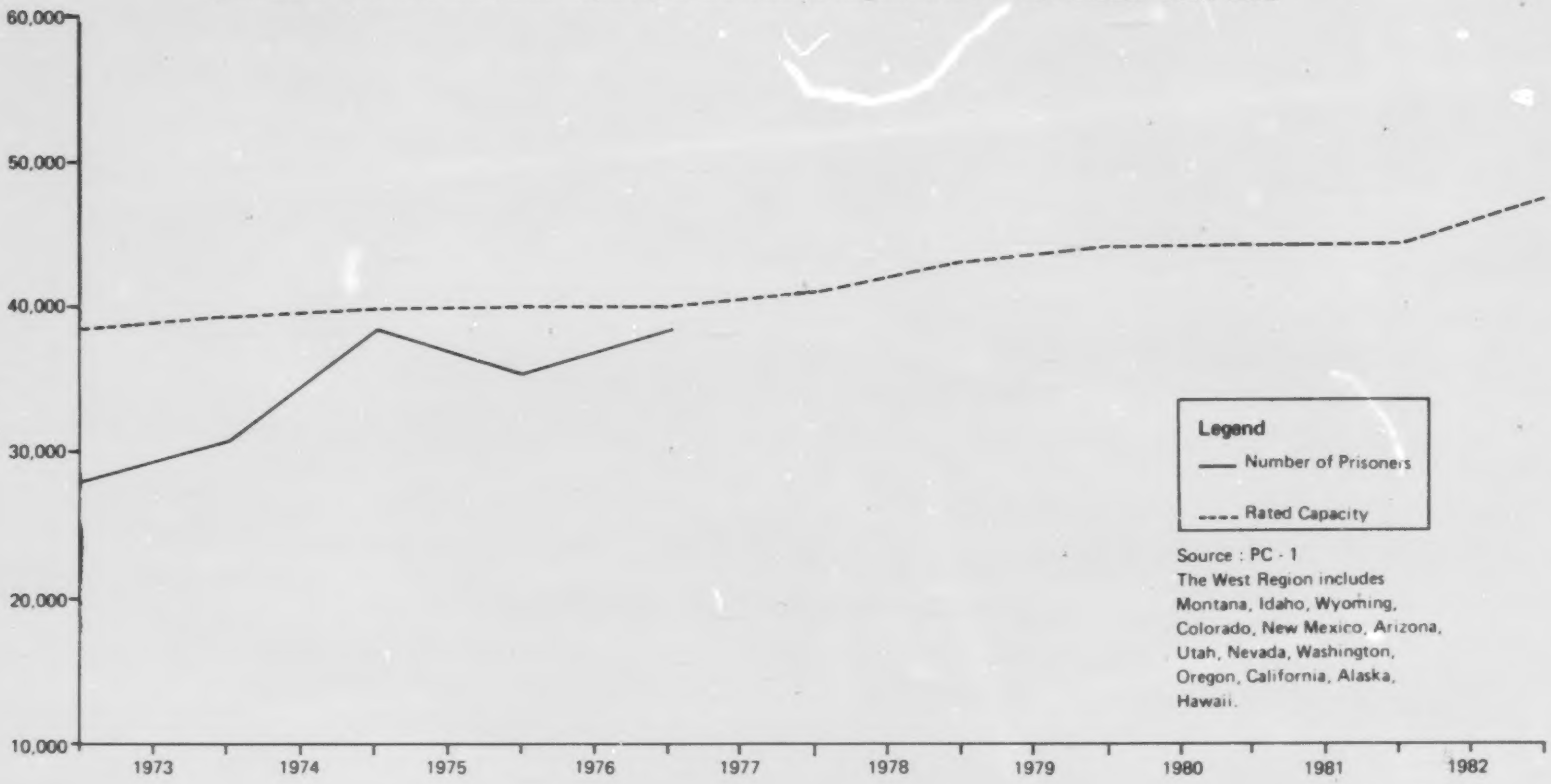
Number of Prisoners and Rated Capacity of the Southern Region of the United States: 1972-1982



Source : PC - 1
Note : The South Region includes Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana Oklahoma, Texas.

Figure 3.13

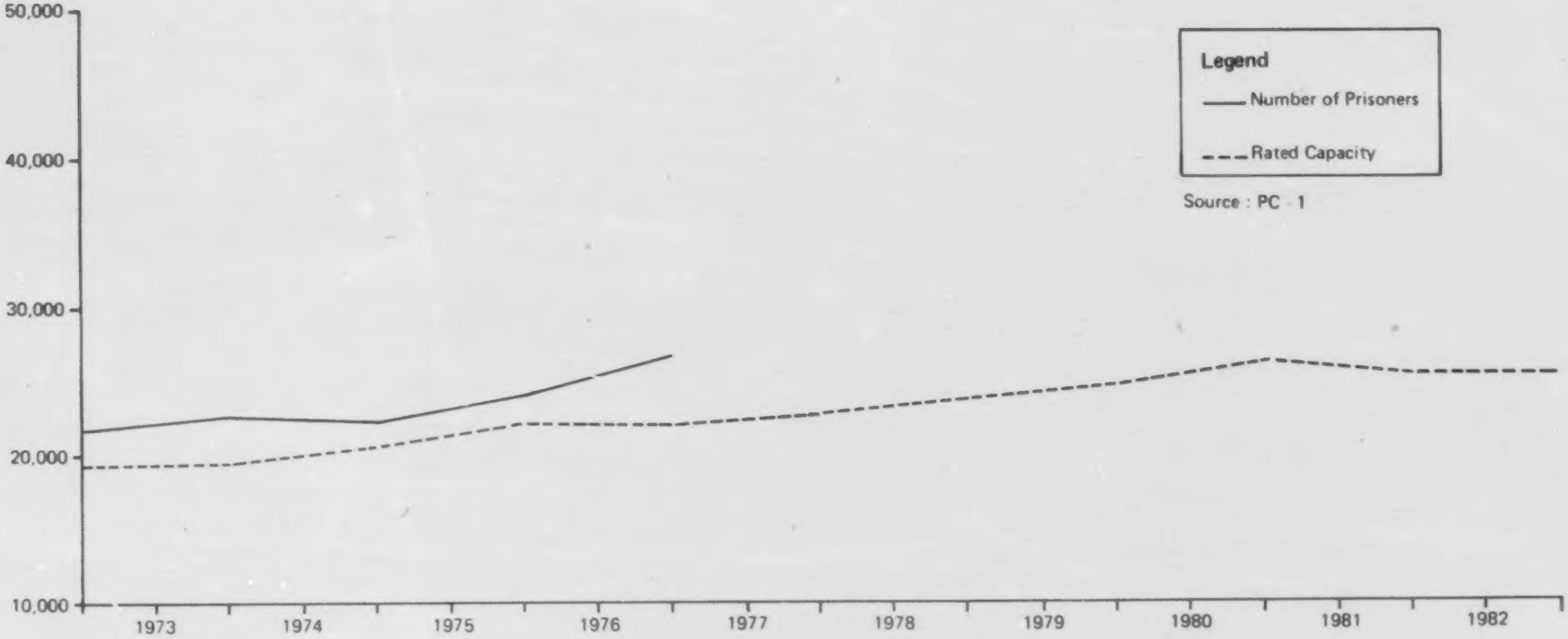
Number of Prisoners and Rated Capacity of the Western Region of the United States: 1972-1982



Source : PC - 1
The West Region includes
Montana, Idaho, Wyoming,
Colorado, New Mexico, Arizona,
Utah, Nevada, Washington,
Oregon, California, Alaska,
Hawaii.

Figure 3.14

Number of Prisoners and Rated Capacity of the Federal Prison System: 1972-1982



Source : PC - 1

Dakota, and West Virginia apparently have no plans to add to their current capacities. All of these States, except Hawaii, which shows a small deficit, indicated adequate rated capacity on June 30, 1977.

Table 3.9 also displays proposed expenditure on all new prison construction and renovations, along with totals for each State, and the cost per bed processed (not necessarily net additions). States with the largest planned expenditures are, not surprisingly, those with the greatest planned bed increases: Arizona, Florida, Illinois, Louisiana, Michigan, and South Carolina; all plan to spend more than 50 million dollars by 1982.

Although there is a substantial amount of data missing, it is possible to estimate the total planned expenditure on the prison system in the United States by applying the average cost per bed (22 thousand dollars) for those beds with which we can associate costs, to those beds on which we have no data.* This estimation is 1,420 billion dollars over the next six years, or roughly 237 million dollars each year.

With regard to proportional increases in rated capacity planned, Table 3.10 displays the net increase in beds as a fraction of current rated capacity. Eleven States plan to increase their capacity by more than 50 percent. Of these the great majority are in the South. In general, it also appears that the States that show the greatest proportional increase in capacity are those that have the greatest proportion imprisoned per 18-44 age group of the general population. In 1976 (see Figure 3.15), 16 States and the District of Columbia imprisoned more than 0.3 percent of their populations in the age range of 18-44 years. Of these 16 States, 10 are planning to increase their capacities by more than one-third.

We emphasize that just as projections reflect the use of particular assumptions about the flow of prison inmates, estimates of future capacity are also based on States' assumptions regarding net additions in bedspace. In both cases, different assumptions might lead to quite different results. With these limitations in mind, we note that additions currently planned may well exceed projected demand in 1982. If all reported construction, renova-

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* Using 22 thousand dollars as the average cost per bed is almost certainly an underestimate. A recent study estimated construction cost per bed as follows: maximum security 37,117 dollars; mixed security 28,480 dollars; jails 27,342 dollars. National Institute of Law Enforcement and Criminal Justice Cost Analysis of Correctional Standards, Vol. 11. Note, however, that the 22 thousand dollar figure is an average cost per bed added and includes renovated and acquired or converted space as well as space to be constructed.

Table 3.10

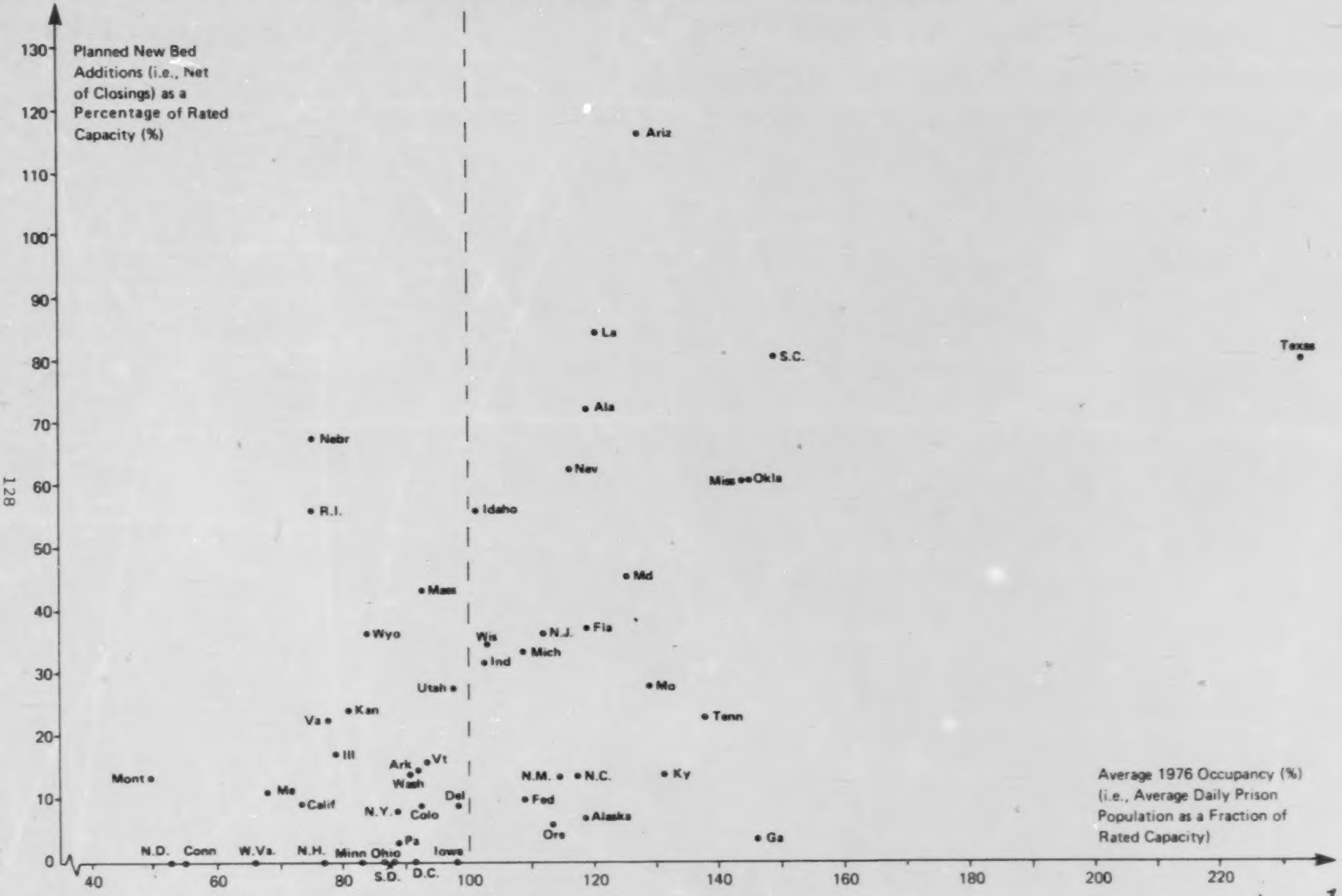
Net Bed Increase as a Fraction of Current Capacity from June 30, 1977 to December 31, 1982

0%	0.1 - 19.9%	20 - 49.9%	≥50%
Connecticut	Pa. (2.2)	Va. (22.2)	Ida. (55.9)
D.C.	Ga. (3.7)	Ks. (22.8)	R.I. (55.9)
Hawaii	Ore. (5.5)	Tenn. (22.8)	Miss. (60.3)
Iowa	Alaska (6.0)	Mo. (27.1)	Okla. (60.8)
Minnesota	N.Y. (7.8)	Utah (27.7)	Nev. (62.7)
New Hampshire	Del. (9.0)	Ind. (31.9)	Neb. (67.3)
North Dakota	Colo. (9.2)	Mich. (33.4)	Ala. (72.5)
Ohio	Federal (9.7)	Wis. (34.5)	Tex. (79.1)
South Dakota	Calif. (9.8)	N.J. (36.1)	S. C. (80.4)
West Virginia	Me. (11.2)	Wyo. (36.5)	La. (84.9)
	N.M. (13.1)	Fla. (37.1)	Ariz. (116.4)
	N.C. (13.1)	Mass. (43.2)	
	Ky. (13.4)	Md. (45.0)	
	Mont. (13.7)		
	Wash. (14.2)		
	Ark. (14.7)		
	Vt. (15.1)		
	Ill. (16.9)		

Source: PC-1

Figure 3.15

NET ADDITIONS TO CAPACITY BY AVERAGE DAILY PRISON POPULATION



tion, and acquisition plans are carried out by then, and if the rated capacity of current facilities remains unchanged, total rated capacity will rise to almost 325,000 beds by 1982. This projected capacity is intermediate between the highest and lowest prison populations projected under the assumptions of Chapter IV. If both intake and average sentence lengths remain at their present levels, the newly added space will serve to house populations up to 10 percent higher than those projected for year end. Given seasonal and day-to-day fluctuations in inmate counts, such plans do not represent a large surplus of space. The highest of the projections of present trends implies a population that would exceed rated capacity by nearly 18 percent at the end of 1982, as compared to a present deficit of approximately eight percent (including State prisoners temporarily held in local jails).

III. NOTES

1. American Correctional Association, *Manual of Correctional Standards*, (3rd ed.: College Park, Md.: 1966).

2. "Prison Unit Issues a Set of Standards," *New York Times*, September, 6, 1977.

3. California Department of Corrections, Proposal to the Joint Legislative Budget Committee of the California State Legislature, *New Facilities Plan for 1977-78 Fiscal Year*, (April 1, 1977).

4. Paul Lerman, *Community Treatment and Social Control* (Chicago: University of Chicago Press, 1975).

IV. PROJECTION TECHNIQUES

Overview of the Projection Problem

Prison population is not a natural phenonenon responding solely to the dynamics of past trends. It is subject to social and political influences, ranging from the availability of community corrections resources to political pressures on parole boards and State legislators. Over the course of years, adaptive measures responding to variations in prison populations have been developed. Anecdotal evidence suggests that judges adjust sentences, and parole boards exercise their discretion, to stabilize inmate populations. During this decade, a number of innovations and reforms have been proposed or implemented with the potential to upset and replace old informal control mechanisms. An important objective of this study is to understand the correctional population response to the new pressure induced by these changes. A secondary objective is to formulate the probable consequences of policies presently in force. Presumably, the present prison-population level reflects the effects of current policies; therefore, we can extrapolate past trends to express the continuation of present policies.

Ultimately, these two purposes have an underlying unity: Responsible statistical statements about trends cannot be made without understanding the forces (both random and policy-related) driving the trends. The essential intellectual task of developing projections thus emerges as gathering empirical data on which to base an understanding of the mechanisms by which past correctional history was controlled. To the extent that we remain uncertain about those mechanisms, any "black box" projection methods necessarily result in unreliable estimates.

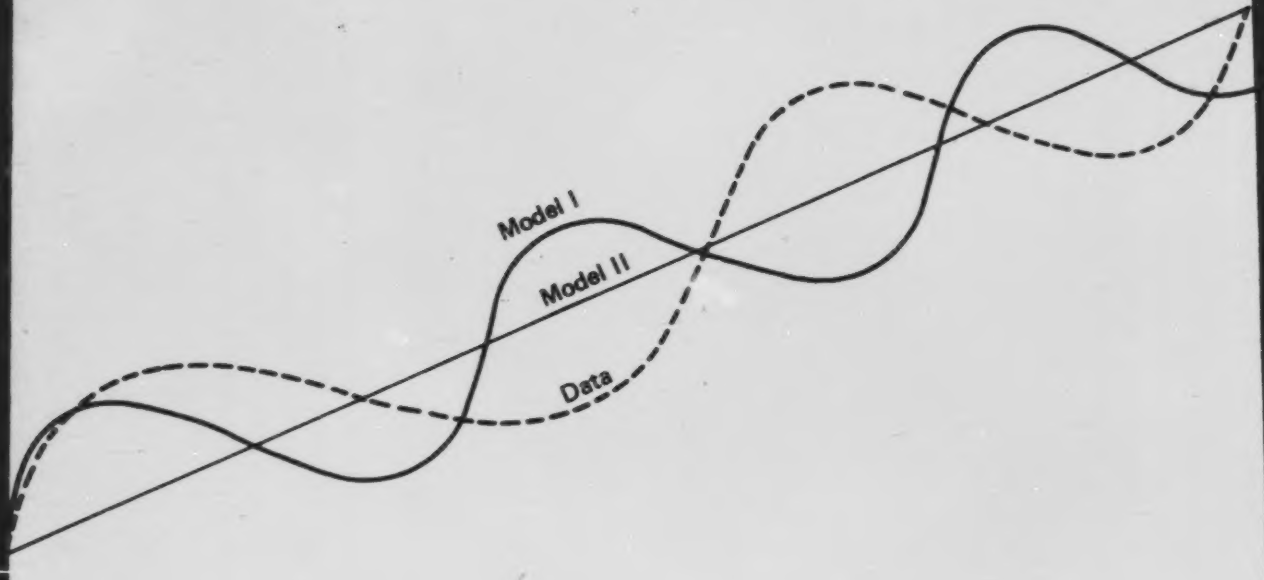
As a practical matter, however, knowledge about the behavior of significant criminal justice system actors is presently limited. Illuminating the inner workings of the black box requires answers to complex empirical questions for which data are often unavailable. Unfortunately, these facts cannot simply be excluded from the projections. Every technique, from the simplest extrapolation to the most complex social simulation, involves a series of implicit or explicit assumptions about the effects of these unmeasured forces. Thus, each projection becomes a mathematical examination of the consequences of a set of assumptions, rather than a statement about the future. In Chapter V these assumptions take the form of descriptions of present policies. In Chapter VI this concept is expanded to explore the possible consequences of selected alternatives to present policies.

This perspective forces us to view projection error differently from the usual statistical sense. In particular, if our projections are to guide policy formulation, it is essential to avoid catastrophic error in any one year, even at the expense of introducing greater overall error. Let us formulate a more precise definition of catastrophic error. To the extent that projections are used in policy formulation, the worst result from a set of projections would be to instill State decision-makers and corrections planners with a false sense of certainty. For example, believing that the system's behavior is easily comprehended or that projections provided in September 1977 are more than estimates could lead to gravely unjustified assumptions. In practical terms, we must develop a systematic view of forces affecting imprisoned populations and the sensitivity of those population levels to small changes in these forces. We must also prepare strategies which confront the uncertainty of our knowledge and avoid either gross over or underestimation of the anticipated populations levels. The implied social cost of five-percent overestimation may be quite different from that of five-percent underestimation. The effects are distributed very differently. Errors resulting in under-utilization imply costs to the State, whereas errors leading to overcrowding place a burden primarily on prisoners and corrections employees. Therefore, we must separate positive errors from negative ones, or at least speak of the two differently. Furthermore, we must select sufficiently stable methods to prevent wildly erratic projections from occurring over the five-year time span contemplated.

Both stability and dynamic sensitivity may be difficult to combine in a single model. Suppose we are dealing with a cyclically varying system, similar to that shown in the broken curve of Figure 4.1. Model I reproduces this cyclic behavior. However, estimation errors cause the periodicity to be slightly inaccurate. As a result, after a few cycles the model and the

Figure 4.1

Two Models of a Periodic System



data are moving in totally opposite directions. Model II captures the general linear trend of the data, providing a better statistical fit in the usual least squares sense, but clearly obscures an important part of the system's dynamic behavior. Obviously, a decision-maker attempting to understand the system's response to structural or procedural changes would be better served by the model which reproduces the variability of the system. For a planner who simply extends present trends, the straight-line estimation of Model II may give better results. Each model is designed to serve a particular purpose and must be evaluated on that basis. Both are useful; neither is adequate by itself. The projection devices discussed in this chapter share many of the features of the straight line extrapolations of Model II. They are essentially policy-blind extrapolations of the effects of recent past trends, and assume that no dynamic reversals of these trends will occur. While they thereby lose the ability to deal with possible system responses, they are less subject to the kinds of timing instability illustrated in Figure 4.1. In Chapter VI we attempt to develop a more responsive model which reproduces the more complex dynamic bahavior shown by Model I, but which also shares some of its instability and sensitivity to estimation errors in defining the system. In this model decision-makers are allowed to examine the consequences of their last action before choosing the next one. The model thus explores the ways in which policies evolve and adapt to changing situations, and the ways in which the behavior of one component of the criminal justice system is influenced by changes in others.

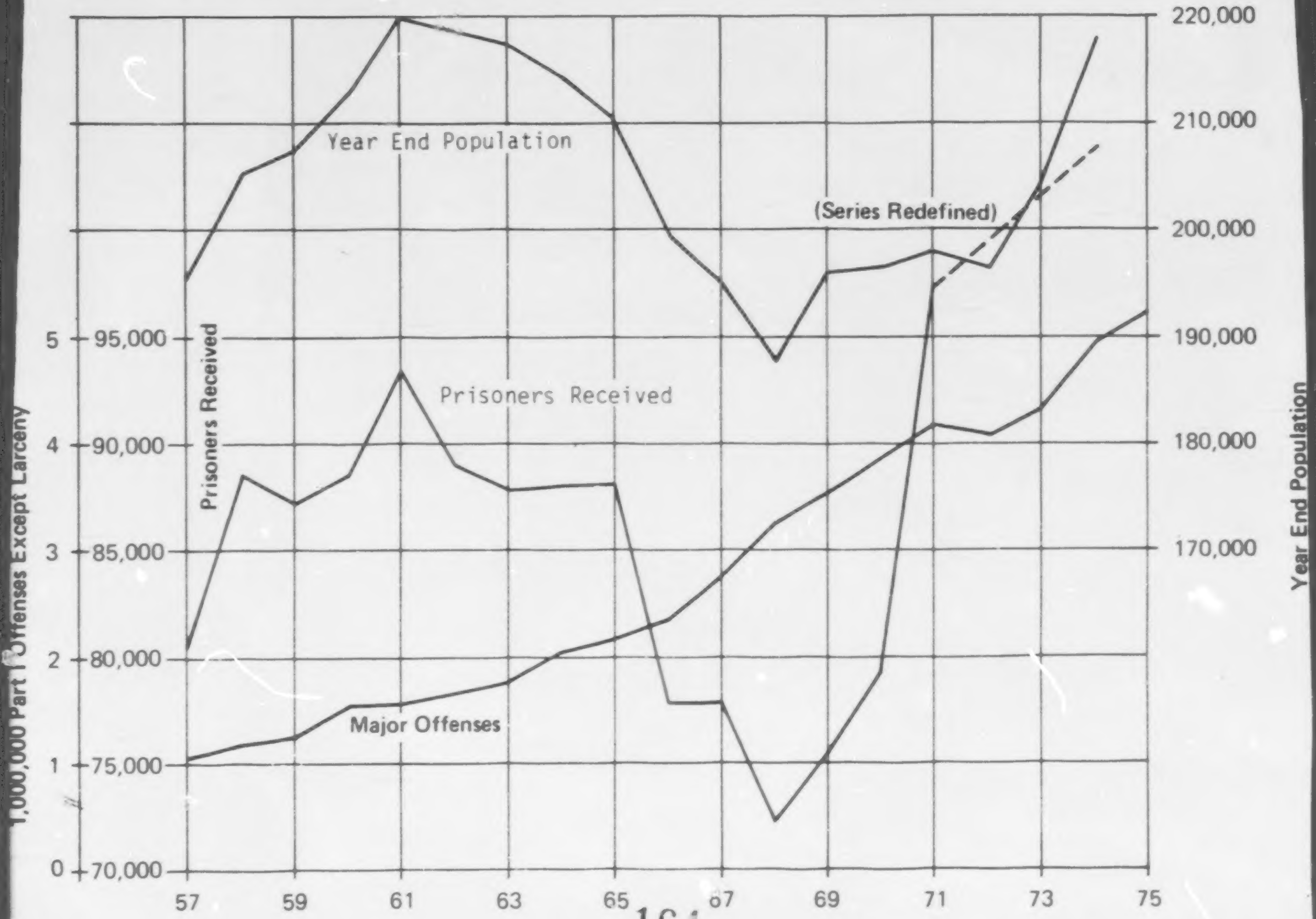
Implications of the Data

Before turning to the projection methods we have chosen, it is important to comment on some alternatives commonly used for this analysis. Figure 4.2 shows the historical trend of correctional admissions in the Federal and State prisons over the last 20 years. A number of conclusions may be drawn from examining these time series.

- A linear model applied over any portion of the curve would result in serious error for most of the remaining curve. As an exercise, we applied a simple trend analysis to these intake rates, for a crude indication of their stability over time. Suppose, for the moment, that we had attempted such an analysis in 1972, and our efforts were confined to estimating intake rate for 1974 (which was, in fact, 89,243 inmates sent to State prisons from the courts). Had we used the trend of the previous five years, the projection would have been 89,366, very close to the correct value. Using 10 years' data, the estimate would have

Figure 4.2

Inmates Received and Present at End of Year, State and Federal Institutions



been 67,500. For 15 years of the series, an estimate of 68,738 would have been received. Therefore, the longer trend data would yield far worse results than the short-term data. In 1972, a reader would not have known the correct value and, confronted with the choices, might easily have interpreted the similarity of the 10- and 15-year results as indicative of greater accuracy. The lesson is clear. Naive dependence on past trend results in serious error, and if the past trend spans enough discontinuities, hidden instabilities in the data may be masked entirely.

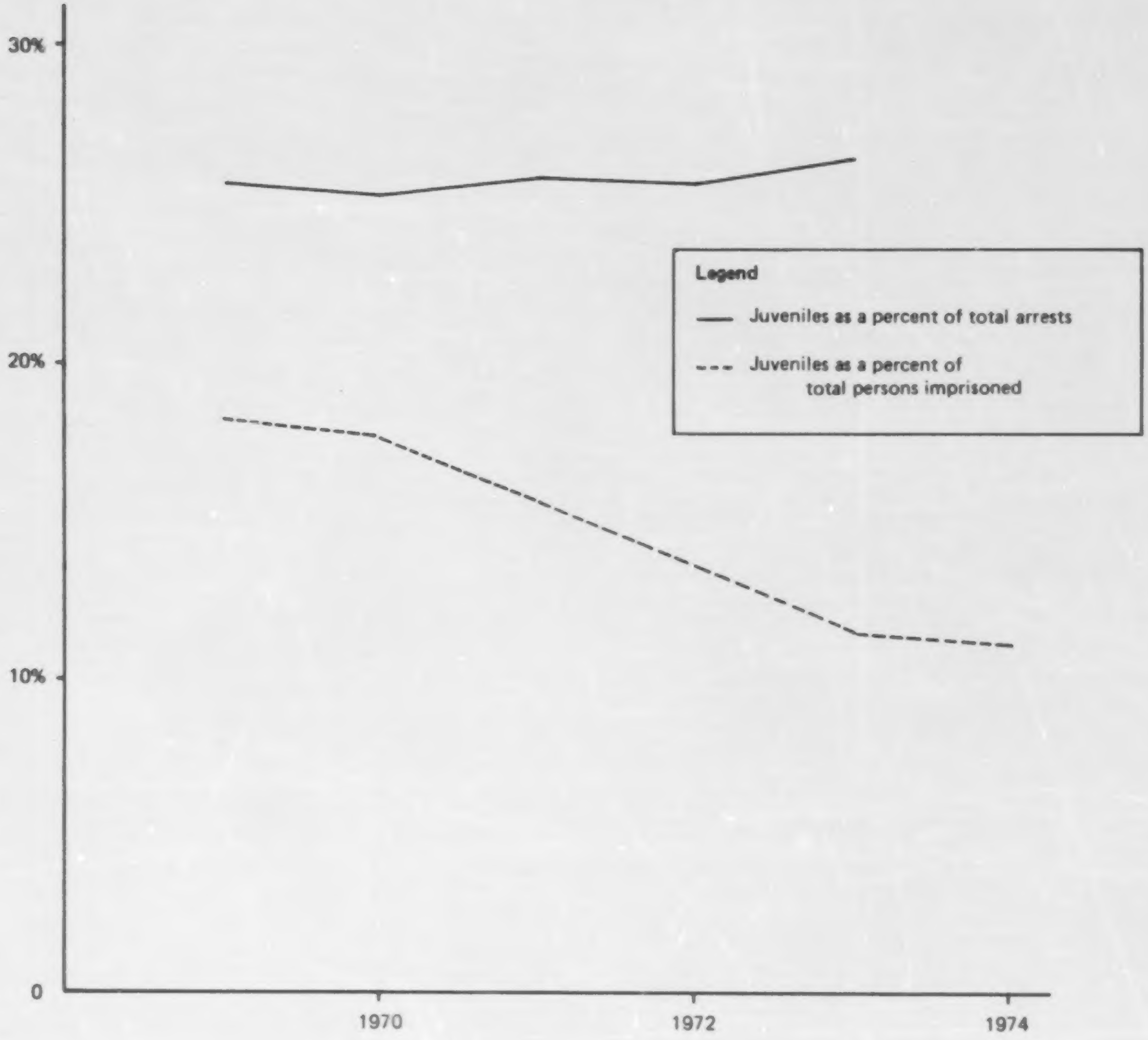
- Recent portions of the curve are marked by major discontinuities. They may involve changes in reporting practices, in addition to actual admissions. M.H. Brunner found that the accuracy of his regression equations was markedly improved by including, during this period, a variable to compensate for changes in the reporting of prisoner statistics.[1] Therefore, we must be cautious of projecting artifacts caused by data acquisition or reporting by examining the context in which the reports are developed.

- The volume of major crimes commited (the variable most plausibly related to prison admissions) is plotted on the same graph. Its influence, if any, is highly obscure. During a period of rising crime rates, the prison population rose, fell, and rose again, without any obvious reference to the number of crimes. If we examine the fraction of juveniles arrested and imprisoned, the complexity of the relationship betweem crime and imprisonment becomes even more evident. During the period shown in Figure 4.3, a deliberate policy of deinstitutionalization was, in effect, outweighing any possible impact of crime or arrest. Such disparities warn that simple one-cause models--especially those that ignore the role of new policy--appear to be of negligible value in describing the phenomenon represented in prisoner movements and prison population levels.

- A major change in policy could produce the sharp, sustained discontinuities experienced in 1966 and 1971. A cumulation of essentially random individual decisions could also produce such discontinuities. In either case, any model attempting to use prediscontinuity policy information for projection would be badly in error.

Figure 4.3

Arrests and Imprisonments of Juveniles as a percentage of totals 1969 - 1974

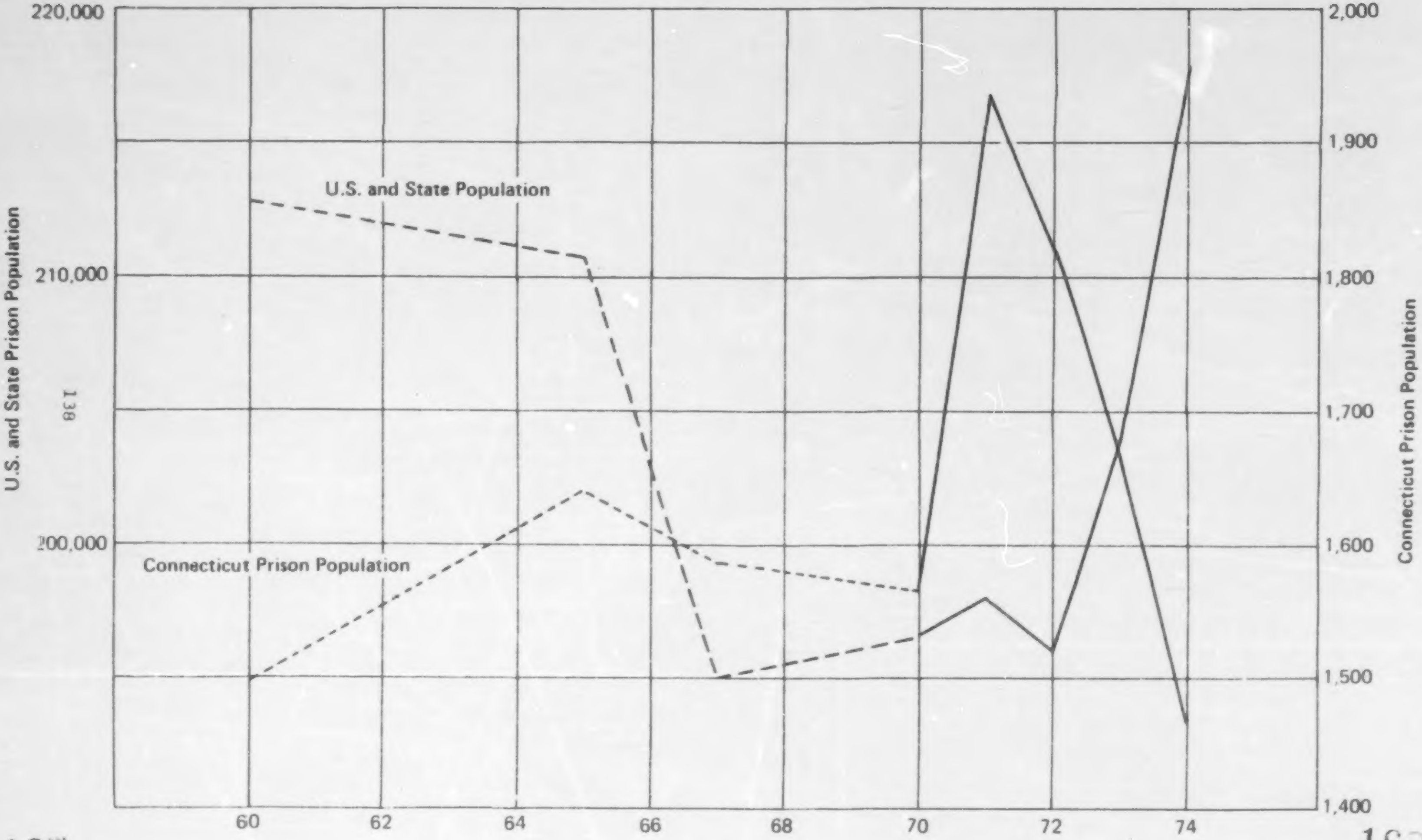


Source: Uniform Crime Reports for 1975, and Sourcebook of Criminal Justice Statistics, 1976.

Figure 4.4

Year End Populations in the State of Connecticut

Source: (National Prisoner Statistics)



- Even within the United States, trends in the aggregate may vary greatly from those in the States. Figure 4.4 shows the total United States inmate population and the number of inmates in Connecticut State prisons. The populations show no resemblance during the past 15 years. Any kind of reliable projection requires at least some understanding of the idiosyncratic history of each State's correctional population, and the jurisdictional, definitional, and policy changes that may be reflected or concealed in the data.

Review of Projection Techniques

The projection techniques previous researchers have applied to estimating prison populations can be grouped in three broad categories (corresponding to the factors assumed to dominate the prison populations):

- Capacity models predict (approximately) stable populations, reflecting society's physical (and perhaps social) limits on incarcerating offenders.

- Flow models estimate rates of admission and release and project changes in prison populations resulting from these estimations.

- Leading indicator models seek variables that (a) can be predicted, and (b) have a predictive relationship to either prison populations or intake.

In seeking techniques for this study, we examined a number of representatives from each of these classes. The case studies provided extensive and detailed data over long time periods. Candidate techniques were applied to present data from these States and to past periods, both recent and distant.

This testing procedure attempted to answer two questions. First, if the technique had been used in the past, how closely would its results have fit the data? Second, were the projection's assumptions logically consistent with the case studies' findings on the operating characteristics of the States' criminal justice systems? Rarely were results simple yes-or-no decisions. Each projection method has some logical merit, and assumptions of each method were more nearly fulfilled in some States than in others.

For example, the capacity-based projections suggest that the populations of single institutions would remain relatively stable, in the absence of new construction or renovations. Over the last decade, the Iowa State Prison at Anamosa's population varied from 1067 in 1967 to 570 in 1974. From the end of World War II through 1967, the population never fell below 1000. The physical capacity for housing this many inmates must therefore have been available even when unused. That prison administrators were willing to phase out some cells indicates a flexibility in the operational meaning of capacity which substantially reduces the predictive power of this model.

It is clear that "capacity," as applied to prisons, has a flexible definition. When Illinois built Stateville Prison in 1919, it was designed to hold 1392 inmates. The last year its population was at that level was in 1929. Throughout most of the prison's 58-year history, the population has fluctuated between two and three times this official design capacity. A Federal consent decree has finally stabilized the institution's population at 2700, twice the design capacity.

Models that postulate general stability in the fraction of the population imprisoned at any given moment are closely allied to the capacity-drives-population school of thought. From this assumption, Blumstein, Cohen, and Nagin developed a second-order, auto-regressive time-series model for the prison population.[2] In their model, the key variable was the ratio (R) of prisoners (P) to total population (T). The form of this model was

$$R_{t+1} = aR_t + bR_{t-1} + c + \text{error}_t$$

where a, b, and c are emperically estimated parameters

This formula is equivalent to predicting next year's ratio on the basis of two facts: (1) the present year's population, and (2) the trend in growth (or decline) from the previous year to the present year.

In our case study States, this model did not provide a significantly better fit than the simpler model:

$$R_{t+1} = aR_t + c + \text{error}_t$$

which used only the present imprisonment rate as a predictor of next year's rate. Both of these auto-regressive models provide statistical fits capable of explaining approximately 90 percent of the data's variance.* The estimates from several model runs range from .83 to .92. Therefore, the model predicts that next year's population is a function of this year's and that the two are nearly equal.

Such a finding had considerable intuitive appeal. Fewer than 25 percent of the inmates are released during their first year. Median times served are never less than two years. Thus, between 50 and 75 percent of the inmates present for one year-end count will be there the next year. The coefficients of the auto-regressive model, therefore, embody the real physical continuity of inmate populations.

Although this is theoretically pleasing, it does not provide useful predictions. Elaborate statistical models are unnecessary to inform us that most of this year's prisoners will remain next year. We next ask whether the auto-regressive models can provide information on prison population changes. Models similar to those described above were applied to the annual changes in inmate count and ratios of inmates to the general population. The performance of the auto-regressive models was substantially worse on this more difficult question: In the simple auto-regressive model, 85 percent of the information in the raw data, as measured by the R^2 statistic, was captured by the equation. In the differenced model, only 15 percent could be explained. With the number of estimate-based observations, the time series models were not significantly better than estimations of year-to-year changes as a constant, plus uncorrelated random disturbances.

Flow Models

The same time-series techniques were applied to the rates of intake (both in the aggregate and as components) and to releases with generally similar results. One further elaboration was added. Recent generalizations of time-series methods have incorporated multivariate statistical techniques to allow an estimation of models with more than one series. The Iowa case study provided extensive series of both monthly and yearly statistics on new count commitments, returned parole violators, prisoners released on parole, and releases through expiration of sentence. These four series were subjected to a combined analysis in which each series was expressed as a function of its own past values and of the past values of the other three series.

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* The exact R^2 varies slightly depending on the State, the time period used, and the number of data points.

The particularly interesting question addressed by this approach is: Does an anticipatory relationship between intake and release exist, and if so, what is its lag? The capacity-drives-population concept would suggest a rather short lag, with parole releases accelerated or slowed to compensate changes in court intake. An alternative model would expect releases to lag intake by an amount approximating the average sentence served, i.e., roughly two years.

The Iowa data provides little support for either view. Using yearly data from 1941 to 1976, the estimated model for three of the four series was the familiar first order, auto-regressive function: court intake tomorrow will approximate court intake today; parole releases tomorrow will resemble those of today; and the number of prisoners released on expiration of sentence is best modeled by its own previous value. The only exceptions to this simple rule are the parolees returned for technical violations. The estimation technique finds a significant* relationship between the present number of technical violations and the number of parole releases in the immediately preceding year.

Interestingly enough, if the series is truncated to exclude the 1970s, this lagged relationship is no longer identified. As readers of the Iowa case study will recall, during a brief period in 1972-73, the parole board experimented with a substantially higher release rate. In the face of adverse public response, triggered by a particularly notorious crime of which parolees were accused, the parole board rather quickly returned to more stringent policies. The statistical model appears to have detected this phenomenon. Its predictive value, however, is doubtful. Several informed persons in the State corrections system expressed the belief that this particular pattern is not likely to be repeated in the near future. The lessons of those years are apparently well remembered.

Leading Indicator Models

Two major candidates from the leading indicator models were explored, using, respectively, demographic and unemployment data as candidates for predictors. In a sense, the stability model that uses the ratio of inmates to total population might be treated as a leading indicator method. Other demographic methods attempt to refine this by defining subsections of the population known to have unusually high rates of incarceration and using them as predictors of the prison population. For this study, the relationship of two subgroups of the population, young adult men and young adult black men, was explored.*

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* Because we are not in a position to stipulate a hypothesized stochastic model for errors in these series, the term "significant" must be interpreted to mean "with approximately 95 percent confidence."

Both studies had disappointing results. Over the comparatively short time span of the last decade, the changes in prison population have been too rapid and abrupt to fit any simple function of the demographic distribution. Since 1960, the ratio of inmates to population at risk declined steadily in Iowa, increased in South Carolina, and fluctuated in Illinois. Using the post-war Iowa time series, a statistically significant correlation between the number of inmates and the population at risk is found. Unfortunately, for both variables, the simple correlations are negative. If a regression model is used to remove the common effect of a simple linear growth trend from the two series, the correlations vanish. Moreover, the imprisonment rates are statistically less stable than the prison populations per se. The coefficient of variation** of the rates is roughly twice as high as for the number of inmates.

Unemployment rates had been used in previous exploratory studies at the national level. These studies had shown a substantial coincidence between unemployment and the number of inmates in Federal prisons. Unfortunately, these results, seemingly significant at the national level, were not supported by the data from our case study States. For this analysis, Statewide annual unemployment rates from 1970-75 were tested against intake and numbers of inmates. Data from California, Illinois, Iowa, Massachusetts, and South Carolina were used. The observations from these States were pooled in an analysis of covariance model. The correlation between intake and unemployment was 0.0478 (df = 21, p = 0.4). The correlation between inmate population and unemployment was 0.0425 (df = 21, p = 0.4). Both these correlations were so near zero as to afford no practical help in projection.

Projection Assumptions

From our experience in applying this range of techniques to data obtained from the case study States, a number of conclusions emerged. These formed the basis for our choice of methods to be used in making policy-free projections. The first conclusion resulted from our inability to find an effective method for anticipating the sudden policy shifts which periodically overtake the system. Once such a turning point had been reached and passed, it could be noted as a discontinuity in the series; until its occurrence, however, there was no basis in available data for predicting a change.

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* For convenience, "young" is defined as between 20 and 29 years of age.

** Ratio of standard deviation to mean.

When policies were shifted, knowledge of parole or sentencing practices before the rule-change provided no improvement in the accuracy of short-term estimations. This fact, together with the observation that small rule-changes were occurring every year, was reflected in the autoregressive models' tendency to rely only on the single most recent observation for their estimates. Thus, on both logical and empirical grounds, we restricted our choice of projection methods to those relying primarily on the current prison population levels, rather than to those employing exogenous indicator variables.

A second observation from the case study States was that intake rates appeared to change either very abruptly--almost discontinuously--or negligibly. It was easy to find step functions in the series; it was impossible to identify trends with any confidence. In addition, no readily accessible variable served as an acceptable leading indicator for the intake rate. Given these limits to our knowledge, we would not anticipate the next change in intake.

Instead, we chose to examine the consequences of a policy which continued the present intake rate, although we were fairly certain that present rates of intake would not be maintained in all States. Knowing only that changes would occur, but not their magnitude or direction, the "no change" assumption was selected as the least improbable of an infinite range of improbable choices. Because the projections are policy blind, they do not attempt to deal with the probability that departures from the basic assumptions will take a particular direction or produce effects of any determined amount. If it is assumed that changes of increasing and decreasing severity are equally likely, these policy-blind projections can be taken as maximum likelihood estimates of the prison population. Knowledge of possible policy changes which may affect the imprisonment levels is taken into account in the projections of Chapter VI, but not those of Chapter V.

In addition to consistency with these observations, we imposed a third requirement on our projection methods: They must be simple to state, apply, and correlate with policy actions. Thus a simple model showing the system's workings was preferred over a complex model which obscured them. As it happened, none of the complex models explored had any predictive superiority to the simpler, intuitively-motivated models that were employed.

Projection I: Constancy

In selecting a theoretical basis for applying a projection technique, one seeks some attribute of the system which can be treated as invariant throughout the relevant past, and expected to remain so throughout the projection period. The various projection methods discussed above can be associated with postulates about the nature of this invariant, so that selecting a projection technique is equivalent to selecting a set of assumptions about structure. The simplest of these assumptions is that the number of inmates is invariant. This assumption has some plausibility: If we accept the hypothesis that prison capacity controls population, or only that it imposes an upper limit, then over a broad range of conditions (probably including those of the last 10 to 20 years) the level of population should be roughly constant.

The constancy will, of course, be expected to be only rough because every model assumes the presence of some random disturbance. Proponents of this view would argue that the growth of the last few years falls into the category of random disturbance, and therefore, there is no basis for expecting its persistence. They would point to previous periods showing growth of comparable magnitude, such as the late 1950s, which culminated in higher levels of incarceration than those in many States today. Over a sufficiently long historical interval, these States do indeed seem to have relatively constant, or at least trendless, prison populations. Our experience in the case study States has revealed mechanisms which apparently contribute to this stability: Iowa's preference for community corrections may have provided an alternative to increasing imprisonment, written orders for accelerated release due to crowding in South Carolina, and Federal court orders fixing institutional capacity in Mississippi and one Illinois prison.

Whether the past fluctuations of prison population have been consistent with this underlying stability depends both on the length of time over which they are examined and on how narrowly one defines stability. Over the entire twentieth century, the aggregate prison population has shown no clear trend except that reflecting the general growth of the nation's population. Over short periods within the century, including the years from 1972-76, there have been seemingly persistent trends, always heretofore reversed sooner or later.

The assumptions leading to a roughly constant prison population estimate are not complicated. If the supply of potential prisoners (i.e., convicted offenders) is large by historical standards (as it has been during the recent years of rising crime rates), there will be upward pressures on the level of imprisonment. However, each added inmate day imposes some cost on the State for care and custody. The simplest of economic models would suggest an equilibrium position, at which the marginal cost of imprisoning the next inmate balanced the society's preference for imprisonment. Under this set of assumptions, prison populations will remain constant except (a) when the marginal cost changes, or (b) when social preferences for imprisonment change. Positing a constant prison population then implies no change in either these preferences or costs.*

In practice, both are subject to change. A new prison, once constructed, lowers the marginal cost of imprisonment and, under this model, will raise the equilibrium number of prisoners. Conversely, obsolescence of existing institutions, provided it is perceived by policy makers, should raise costs and lower populations. References are likely to change in response to changes in crime rates, or more accurately, to changes in perceived crime rates, which are likely to lag behind actual changes and to contain systematic biases.

There is also a purely technical appeal to models that involve constancy of the prison population. The number of inmates in October is not determined anew from October's costs and social preferences. Most people imprisoned in October were also imprisoned in September. Simple though this fact is, it allows us to develop the beginnings of a useful quantitative theory for exploring the time series data and for interpreting the parameters which are estimated through time-series modeling.

$$P_{t+1} = a P_t + b$$

where P_t is the population at time t,

a is the fraction remaining, and

b is a constant influx (or egress) of prisoners independent of t.

This form is the well-known first order auto-regressive model of a stationary process. We can apply some general theoretical results for all such models to the prison population. Perhaps the most interesting is that every such model has an equilibrium point toward which the series tends to move. In this notation, a stable prison population occurs whenever

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* Excluding the rather unlikely contingency of exactly countervailing changes in both.

$P_{t+1} = P_t$, that is, $P_t = a P_t + b$. Solving gives $P_{\text{stable}} = b/(1 - a)$. Hence, for any $a \neq 1$, and for any b, there is some stable population level, to which the assumptions of the model imply return. The condition $a \neq 1$ makes estimation of the parameters particularly important because it provides a test of the predictability of the series. The more nearly a approximates 1 in the data, the more volatile the prison population, and the more persistent will be small departures from equilibrium.

In the case study data, these returns to stable levels seem to occur once or twice per decade and to take the form of abrupt discontinuities. The South Carolina State Corrections Department assumed jurisdiction of prisoners serving terms over three months; Illinois introduced a new form of conditional release increasing the number of paroles; Iowa raised its parole rate for two years and then reversed its policy; Mississippi had Federal court intervention. Assuming similar reactions to extreme population also occur in other States, we might expect that by the end of 1977 at least half a dozen States would have departed significantly from their recent historical trends. By the end of 1982, many States will have experienced at least one such discontinuity. Since the assumptions of the model say nothing about which direction a policy change will take (or about its magnitude), many of the projections for 1982 derived from linear extrapolation will be based on false assumptions, and will therefore contain errors of unknown direction and magnitude.

Moreover, at this point we cannot predict in which States these discontinuities are likely to occur. In every historical instance, plausible causes have been advanced to account for the abrupt changes: courts, prosecutors, parole boards, governors, and legislators. In general, it is safe to state that, had the changes occurred in other years, or in other directions, equally plausible explanations could have been produced. In most States, at most times, some variable which could explain imprisonment increase or decrease is changing. Unique events are so frequent that their predictive power is weakened.

Projection II: Constant Flows

In our case studies, we find the rate of parole release often subjected to large discontinuities. It can rise or drop, sometimes by as much as 50 percent, within the span of a single year. Compared to these abrupt policy changes, neither year-to-year variation nor trends between steps appear significant. Less frequently, intake variables show similarly discontinuous behavior. Over a span of time long enough to include one or more of these discontinuities, prisoner movements are clearly not good candidates for the central invariants of a model. Between discontinuities, however, it is possible that rates of intake and exit hold roughly constant levels. By an obvious tautology,

$$P_{t+1} = P_t + I_{t,\,t+1} - E_{t,\,t+1}$$

where P_t is the number of inmates at time t, as before,

$I_{t,\,t+1}$ is intake between time t, and time t + 1,

$E_{t,\,t+1}$ is exits over the same interval.

Since this projection assumes constancy of both intake (I) and exit (E), and hence of their difference, the result is constant linear growth or decrease. In the special case where I = E, Projection II reduces to Projection I. In any other case, Projection II eventually becomes an absurdity, since linear extrapolations must eventually run to plus or minus infinity. Clearly, long before that day arrives, some departure from linearity, either as a discontinuity described above, or as a functional change, will occur.

At any time, a number of proposed policy and administrative changes are being considered in each State. Each of these changes could influence prison populations in one direction or the other. The manner in which the changes are implemented could also influence prison populations. Of the many changes proposed each year, a few are implemented with vigor. Some of these changes reinforce one another; some counteract one another. Occasionally, changes that are implemented, alone or in combination, influence populations dramatically. However, one cannot accurately predict which of the many proposed changes will be implemented, or the precise quantitative effect on prison populations that various combinations of proposed changes will have, if implemented.

Projection III: Constant Sentences

The third projection method assumes (as does Projection II) that intake continues at its present rate. Further, it requires that releases will follow admissions at a constant lag, so that sentences served will remain at approximately their present level. In States for which time-served data are available, lags estimated from sentence data correspond, within one or two months, to lags estimated from intake and release rate data.

The projection estimates the lag between exit and intake, on the basis of 1976 exits (excluding releases other than parole and expiration of sentence). It then calculates projected future populations, assuming that this same lag will apply throughout the projection period. Like Projections I and II, the assumptions of this projection method may fail. While some States have shown stable intake over recent years and others may now be leveling, we have just experienced a period of rising court commitments. It is highly plausible that some States will continue to show this increase. Others may show decreases in total intake. Moreover, even where the intake assumption is met, sentences may become longer or shorter, destroying the assumed relationship between intake and exit.

The projections in the next chapter are based on 1976 data. The projection period ends in 1982. With sentences between two and three years, this means that the last projected point is two or three prison generations removed from the most available data. Projected intake and release are both dictated entirely by the assumptions of the method from 1980 through 1982. This dependence of projections on assumptions is equally true for all projection methods; however, the brevity of actual prison stays, compared to the six-year projection period, dramatizes the remoteness of all of our estimates (especially for the latter half of the period) from actual data.

Limitations of Projections

Each of the projections printed is, in a sense, error free. The respective methods stipulate the constancy of some observed behavior, and project the consequences of that assumption. On an "if..., then...." basis, the projections are mathematically true. The problem, of course, is that the "if's" of any particular projection can never be exactly true.

Essentially, there are two ways in which reality and our assumptions differ. The first is comparatively simple statistical noise. The arrival of cases from court, or their departure upon release, can be viewed as a random process described by statistical parameters. Once the gross yearly rate of arrival (departure) is fixed, either assumption or by projection the random process can be adequately described by specifying an event's probability during each short unit of time throughout the projection period.

To a first approximation, it can be assumed that this event probability is a constant over all periods within a year. This description is not strictly true: events cluster to reflect vacations and weekends, days when courts are in session, and seasonal workload factors. The statistical effect of such clustering is not large, however, and, for purposes of these calculations, may be ignored.

With this simplifying assumption, and our projection assumptions of constant intake rates--and hence a constant probability of each independent event--we can approximate the random portion of the intake decision by a Poisson process. Assuming that yearly intake is a random variable drawn from a Poisson distribution with mean I, the standard deviation of intake will be $\sqrt{I}$. Further, assuming that the release process is similar to intake, the standard deviation of exits will be $\sqrt{E}$, where E is the mean of the yearly exit rate distribution. By elementary algebra, the standard deviation of I - E, the net population change, is

$$\sqrt{I + E - 2\,\mathrm{cov}\,(I,E)}$$

where cov (I,E) is the covariance of intake and exit within a year. For the present calculations, we have assumed cov (I,E) = 0, which leads to conservative estimates of the standard deviation.

Each additional year's projection is the accumulation of projections for prior years, plus flows for the present year. Thus, it contains all the error of the preceding years plus the contribution of the present year's flow. Under our projection assumptions, the flows themselves, and hence their standard deviations within a year, remain roughly constant through 1982, so that the variance grows linearly with time. In addition, the standard deviation of the population estimate itself increases as the square root of the number of years.

The second form of error which can be expected is not easily estimated. The parameters assumed as constant will not remain constant through all time. They will increase or decrease to reflect changes in policy. If court processing rates suddenly increase, an intake spurt may follow. If sanction levels become more severe, exits may slow. The projection's assumptions that these parameters can be predicted from their past values are likely to be invalidated from time to time.

Even without deliberate policy changes, some change must occur in at least one of the three variables: sentences, intake rates, or exit rates. If intake rates remain constant (as assumed by Projection III) and sentence lengths also stay at their present levels, the rate of release cannot remain constant (as assumed by Projection II), since releases must approach and eventually equal intake after an appropriate lag. Conversely, constant flows (assumed by Projection II) imply a changing average sentence (contrary to Projection III). This is most easily seen by considering the fact that an inmate arriving to serve a five-year term represents five person-years of custody. A steady flow of such arrivals means that the number of persons in custody approximates the average effective sentence times the intake flow. When the number of persons in custody rises (as it does in Projection II) while flows remained constant, the average sentence must increase.

As a result of these facts, the assumptions of Projections II or III are mutually inconsistent except in the steady state assumed by Projection I. Intake, exit, and sentence can all simultaneously remain constant only if population also remains constant. Therefore these policy-blind projection methods themselves force on us the conclusion that some policy changes will occur, simply because of the mathematical impossibility of continuing "business as usual" indefinitely.

The Need for Policy-informed Projections

Although black box trend projections may prove to have been accurate predictions after the fact, most decision-makers are uncomfortable using them as a basis for action. If the past performance of a system is not understood or explained, then its future cannot be confidently predicted.

In this study, this principle creates a premium for understanding the effects of policy decisions on correctional populations. Focusing for a moment on the notion of discretion as a specific form of policy action in the criminal justice system is useful.

One underlying feature of the major innovations that characterized the present decade of criminal justice programs is the exercise of discretion. Court cases and guidelines have helped to define the discretionary roles of arresting officers, prosecutors, and judges. Diversion and screening programs have been instituted to formalize and channel the discretion of these actors and to allocate both community and criminal justice resources to selected defendants or offenders. Patrol allocation and enforcement strategies reflect either implicit or explicit exercises of discretion. Parole boards are developing new kinds of supportive services and new concepts of due process to improve their ability to make sound release concepts of due process to improve their ability to make sound release decisions. Emerging from this brief catalog are two important factors. First, many of these innovations may have major effects, not fully anticipated, on the imprisoned population of the United States. Second, the decisions regulating both the influx and departure of prisoners are largely exterior to the institutional-corrections component of the criminal justice system.

In light of these factors, the population situation confronting many of the nation's correctional agencies acquires a special significance. Correctional administrators have no control over a rapidly accelerating number of prisoners flowing in and out of the system. The corrections administrator has some control over the security classification of inmates, and limited ability to reallocate space within an institution, but has no control over the amount of prisoners entering or the length of their stay. Under such circumstances, the corrections specialist sees prison populations as determinate, an externally defined natural phenomenon which can be tabulated, possibly anticipated, but not controlled. From the broader perspective of the entire criminal justice system, this deterministic view appears as an anomaly. The existing population of our prisons is a direct result of decisions to put people in and take people out. Many of the individual decisions may be made in disregard or ignorance of their eventual impact on the prison population, but the aggregate reflects implementation of either implicit or explicit policies. These policies control the size of the prison population, and the projections in this study must consider these decisions.

Entire meanings of parole and rehabilitation in prison are being rethought. The concept of the sentence is being given new definition. A significance of these policy debates concerns determinate sentencing. The intent of such schemes is often to adjust sentences thus, leaving average prison stays unchanged. In general, no clear guarantee states that such adjustments will have the intended consequences, nor that the intended changes can be implemented in practice. A more interesting problem, however, is the potential structural impact of changes in sentencing on the stability of the prison population. Parole now serves as a mechanism for regulating the size of the institutional population. The delay between a parole decision and the inmate's release can be as small as a few days. Through the informal evolution of the corrections system, the rate of parole granting has become a device capable of fine-tuning the size of the institutional population. Parole can fairly quickly respond to conditions of severe overcrowding. With a trend toward determinate sentencing, and the abolition of parole, the delay between the release decision and actual release abruptly expands from days to years. The kind of immediate adjustment provided by parole vanishes, leaving a corrections population whose size depends on decisions made months or years ago instead of on responsive population-control mechanisms. In systems-analytic terms this means that the stabilizing influence may suddenly pass a crisis point and begin to cause major instability. For example, while average daily population remains unaffected, the size of fluctuations in the population becomes grossly magnified, possibly resulting in transient periods of grave overcrowding interspersed among periods of facility underutilization.

The dynamic consequences extend beyond the corrections systems as changes in sentencing and release practice begin influencing plea negotiations and trial proceedings. Since these actions will be affected by factors such as expected length of stay and will, in turn, influence the number of people sent to prison on any given sentence, a complex interplay between the corrections system and the actions of legislators, prosecutors, and courts begins to emerge.

The trend extrapolations discussed above have two crucial limitations on this complex environment. First, they are generally inflexible in dealing with the ways policies of other actors may change in response to a changing correctional situation. Secondly, the trend extrapolation can accommodate changes in corrections policy only in the form of fairly detailed assumed sets of parameters which are selected to reflect presumed consequences of the new policies. The problem of selecting these new parameters is usually as difficult as the original projection, and the trend extrapolations give little guidance for this task.

In providing criminal justice decision-makers with any useful guidance in selecting policy, the black box of the trend-projection techniques must be supplemented with a policy-informed projection device allowing us to observe and manipulate numerical quantities and the structure of the simulated system. As the most appropriate mechanism for constructing such a model, the application of techniques known collectively as "dynamic modeling" was selected.

Dynamic Modeling is an approach to complex social systems developed at the Massachusetts Institute of Technology during the past 20 years. As applied to the problem at hand, it provides a means of analyzing the influence criminal justice policies and practices have on the correctional population and other features of interest. Assumptions about the initial magnitudes of the populations and the factors affecting the various flows are built into a central model. The nontechnical reader must understand what such a model is, and more important, what it is not. As used here, models are not predictive tools or scenarios. They are quantitative structures used for organizing and storing information. In this case, the information concerns assumptions about the interrelationships of the elements of the criminal justice system. The models are useful for this general task and, in particular, for keeping in mind groups of relationships that are difficult to integrate and remember. Both conceptually and in practice--since the information is stored in a computer--the models are memory banks.

However, the model and its machine can remember only what they are told to remember by the modeler. For many aspects of the criminal justice system, precise and validated information about internal relationships is not accurately documented. This is a central difficulty in attempting correctional forecasting. There is no agreement, and in many cases no information other than anecdotal, about the causal relationships that these models require. Thus, the assumptions that the author provides to fill these gaps are necessarily informed judgments rather than truly empirical findings. As a general rule, the direction of a relationship can be identified with more confidence than can its exact quantitative magnitude. Accordingly, the results of the model are likely to be of more value for their qualitative indications of the general direction of change than for their numerical estimates of the magnitude of that change.

The Dynamic Modeling approach is considered appropriate to the objectives of a policy-informed projection for the following reasons:

- The model provides a systemwide view of the criminal justice system, with special emphasis on corrections. Thus, the model will permit looking at policies of the correctional agencies and allow analyzing the impact of court and sentencing policies on corrections.

- The simulation provides explicit numerical values for all populations and flows of interest at specified times. Thus, the model generates values for comparison with the past and also provides the required projections for the future. These values are not to be considered reliable forecasts of actual occurrences, however.

- The approach can use all relevant data, whether numerical data or descriptive data, from the literature or from experts in the field.

- The model can easily accommodate alternative scenarios. It will contain explicit representation of the ways in which various policies might influence system operations. To change policies, variables representing the effects of the policies can be explictly inserted in the model, and this has been done as described in Chapter VI. Where informed opinion diverges on the best way to represent important influences, the model can be operated with alternative formulations.

- The model could be constructed quickly and subjected to continuing refinement to improve its usefulness. As the various significant "what-if's" become matters of general agreement, the enhanced knowledge would be incorporated into the model.

- The model will be easily transportable to other agencies and to other situations. Due to its systemwide focus, it should interest a variety of criminal justice agencies at the Federal, State, and local levels. Understanding the approach does not require mathematical expertise. Programmed in the computer language DYNAMO, the model can be transported to a wide variety of computers that can accommodate this language.

The Dynamic Modeling approach also entails certain drawbacks:

- Development of the model requires attention to the interactions among the various components of the criminal justice system. Typically, a system-dynamics model is far more complex than the models used in trend projection techniques.

- Consequently, disaggregating the model into fine categories is often impractical. Therefore, trend-projection techniques are used for detailed forecasts by State and sex of the offender. In this phase of the study the dynamic model could only be applied to those states were sufficiently detailed information was available either from public information or from the case studies.

- The detail of the model usually requires assumptions about causal influences that cannot be readily established. In these instances descriptive types of information are used in the usual process of debate involved in conventional policy analysis.

- Trend projections may, in fact, generate short-term forecasts more accurately than the behavior exhibited by the dynamic model.

Despite these limitations, the Dynamic Modeling approach seems well suited to the only type of policy-informed projection appropriate to this study: a structure of conditional statements that can provide the Law Enforcement Assistance Administration and the Congress with a wide range of alternatives: "If you choose that policy course, this is what will probably happen throughout the criminal justice system and its correctional subsystem." This type of effort is distinguished from one that attempts to tell the audience, "This is what the future holds." The meshing of the qualitative scenarios and the quantitative modeling is described and illustrated in detail in Chapter VI.

IV. NOTES

1. M. Harvey Brunner, "Estimating the Social Costs of National Economic Policy: Implications for Physical and Mental Health and Criminal Aggression," Study for the Congressional Joint Economic Committee (Washington, D.C.: Government Printing Office, 1976).

2. A. Blumstein, J. Cohen, and D. Nagin, "The Dynamics of a Homeostatic Punishment Process," Journal of Criminal Law and Criminology, 63, 317-334 (1976).

V. POLICY BLIND–PROJECTIONS

In the preceding chapter, we examined some of the inherent logical problems of projection. Projection methods are limited by the validity of their assumptions. There is no guarantee of the limits within which the assumptions used by these methods, or any others, would be valid for any portion of the next five years. This chapter examines the actual data used for preparing these projections. As our limited knowledge of the future weakens our confidence in the projections, our limited knowledge of the past--as reflected in the data used here--further increases our uncertainty.

The initial problem with the data is that already they are at least nine months out of date. The only data consistently available from all States reflect inmates' movements during calendar year periods, as specified by the National Prisoner Statistics. Hence, our most recent population figures refer to December 31, 1976. Prisoner movements are aggregated over the calendar year; therefore, our most recent data reflect events occurring from nine to 21 months before our projections were prepared.

This study was partially motivated by a belief that correctional populations were in a period of rapid change and high uncertainty. As far as this belief corresponds with actual conditions, the information lag imposed by the state of correctional statistics is particularly debilitating. To project 1982's populations, we must begin by projecting 1977's.

The survey for this project was conducted in midyear. In some States, data for the first half or first quarter of 1977 were available; in the case study States they were collected. The data suggested the presence of seasonal trends. In particular, December seems to be characterized by reduced intake, probably reflecting the vacation schedules of courts. Since our only consistent historical series--the National Prisoner Statistics--

used a December 31 reference date, the more recent data (spring and summer of 1977) could not be directly integrated with prior years' data for use in the extrapolations.

A related problem concerns the currency of correctional records themselves. We supplied each State corrections agency with a copy of data they had sent to the Bureau of the Census earlier in the year as part of the National Prisoner Statistics Survey. Half of these forms were returned with corrections of up to 10 percent in individual counts. Since the unchanged forms may have been either accurate or simply not checked, we cannot estimate the total number of States whose current year-end population estimates differ from those used six months ago. Similarly, the number of States whose 1976 estimates will ultimately be revised is also unknown.

The problem of data accuracy extends far beyond minor revisions to correct random errors. For our purposes, systematic events that distort the meaning of the data are far more serious. South Carolina's projections, for example, are based on data that reflect growth partially due to jurisdictional transfers. We were aware of this fact only from the extensive data gathered by the case studies, which warned us against seriously considering the extrapolation results in South Carolina.

There is no guarantee that similar transactions are not involved in the other States' projections presented here. On the contrary, it is highly unlikely that all other State projections are free from distortion. Similarly these policy-blind projections are implausible in States with policies known to have changed since the period described by the data. For example, all past data from California reflect a set of policies that was completely unrelated to the policies envisioned by the flat-time legislation. Chapter VI, which explores in detail this and other kinds of policy changes, clearly demonstrates that such actions' effects on prison populations depend entirely on the manner of policy implementation (which may not resemble the original decision-makers' intentions).

In this chapter, any analysis that the projections can undergo is actually an analysis of the past and the assumed relation between the past and future. A projection showing a five-percent growth rate signifies that the past data are consistent with that rate, not that such a rate characterizes the future.

Projection methods used in this project rely heavily on assumptions about intake and time served. In 1976, the year this study was mandated, all but seven States (see Table 5.1) had experienced higher intake rates in 1975 than in the preceding year. The median growth rate in intake was 13 percent, and a quarter of the States (see Table 5.2) showed spurts of 25 percent or more.

This tide apparently has abated. In 1976, exactly half the jurisdictions showed intake rates lower than the previous year's. The mean rate of increase was 1.3 percent. Across the nation, intake increased by fewer than 3000 inmates. In 20 States with lower intake, the decrease exceeded five percent (see Table 5.3). Sixteen others showed at least five percent increases (see Table 5.4). This distribution of 1975-76 changes agrees with the hypothesis that no further increase (or decrease) has occurred in the rate of intake.

The evidence on time served is less clear. Actual data on time served are available in only nine States for 1976. (Table 5.5 shows median time to first release in these States.) Only five of these States have data available for a previous year. Such limited information cannot support useful conclusions about changes in sentence length.

Table 5.1

Decreases in Intake 1974 - 1975

for Male Prisoners

State	Intake 1974	Intake 1975	Change
California	11,836	9059	-23%
Hawaii	219	166	-24%
Indiana	2957	2476	-16%
Michigan	6925	6217	-10%
Vermont	239	199	-17%
Virginia	3938	3116	-21%
Washington	2158	1957	- 9%

However, an approximate index can be computed for all States from information on prisoner movements. In a steady State system, the average time served by inmates released will exactly

Table 5.2

Increases in Intake 1974 - 1975

for Male Prisoners

State	Intake		Change
	1974	1975	
Arizona	1125	1492	+33%
Connecticut	1272	1832	+44%
Florida	7033	10,164	+45%
Illinois	3550	4615	+30%
Iowa	824	1044	+27%
Kansas	1187	1690	+42%
Massachusetts	1492	1920	+29%
Montana	329	412	+25%
Nebraska	660	836	+27%
Nevada	330	464	+41%
New Hampshire	247	361	+46%
Oklahoma	1963	2483	+26%
Rhode Island	180	227	+26%
Tennessee	2127	2852	+34%
West Virginia	842	1181	+40%
Wyoming	122	176	+44%